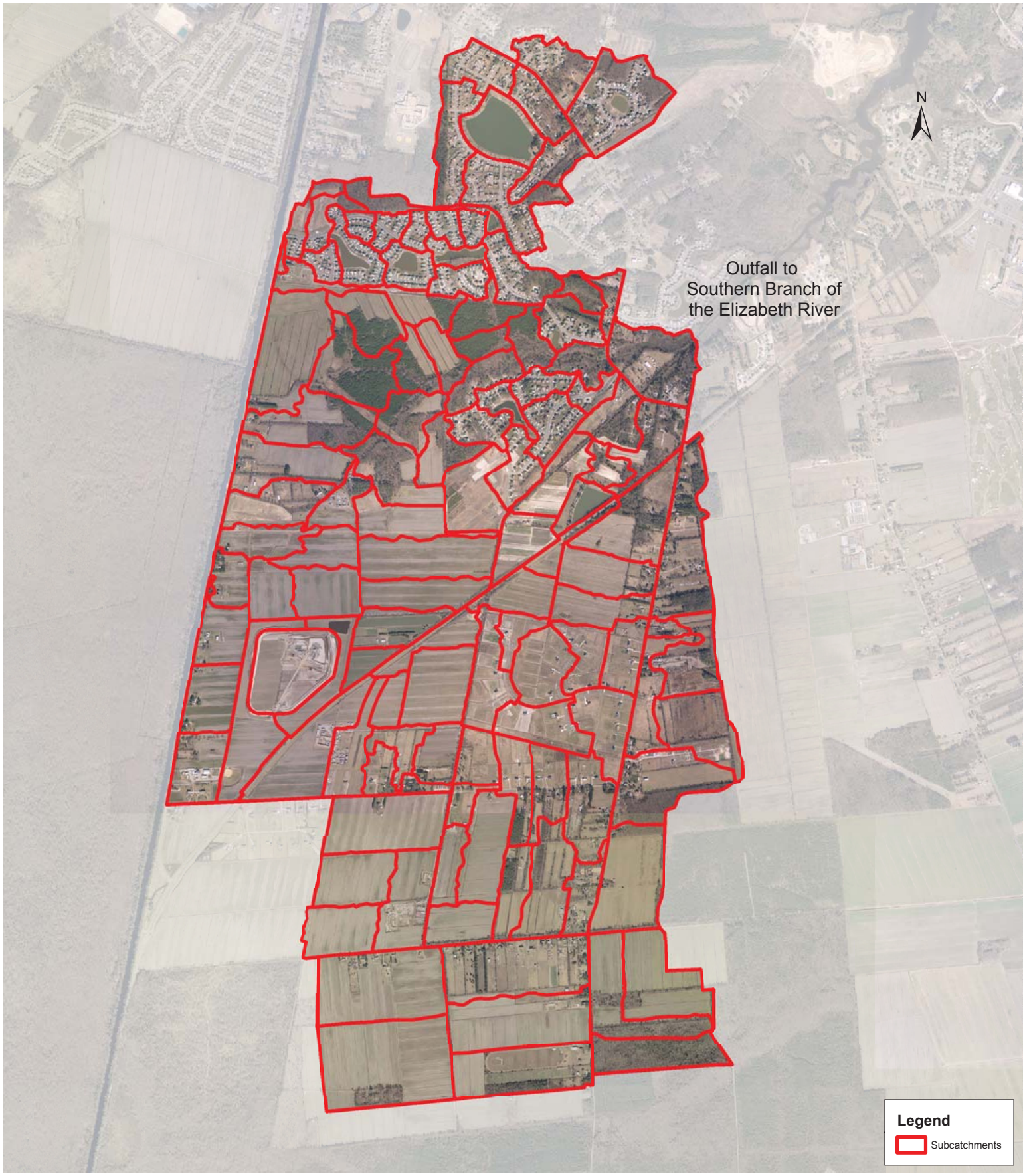
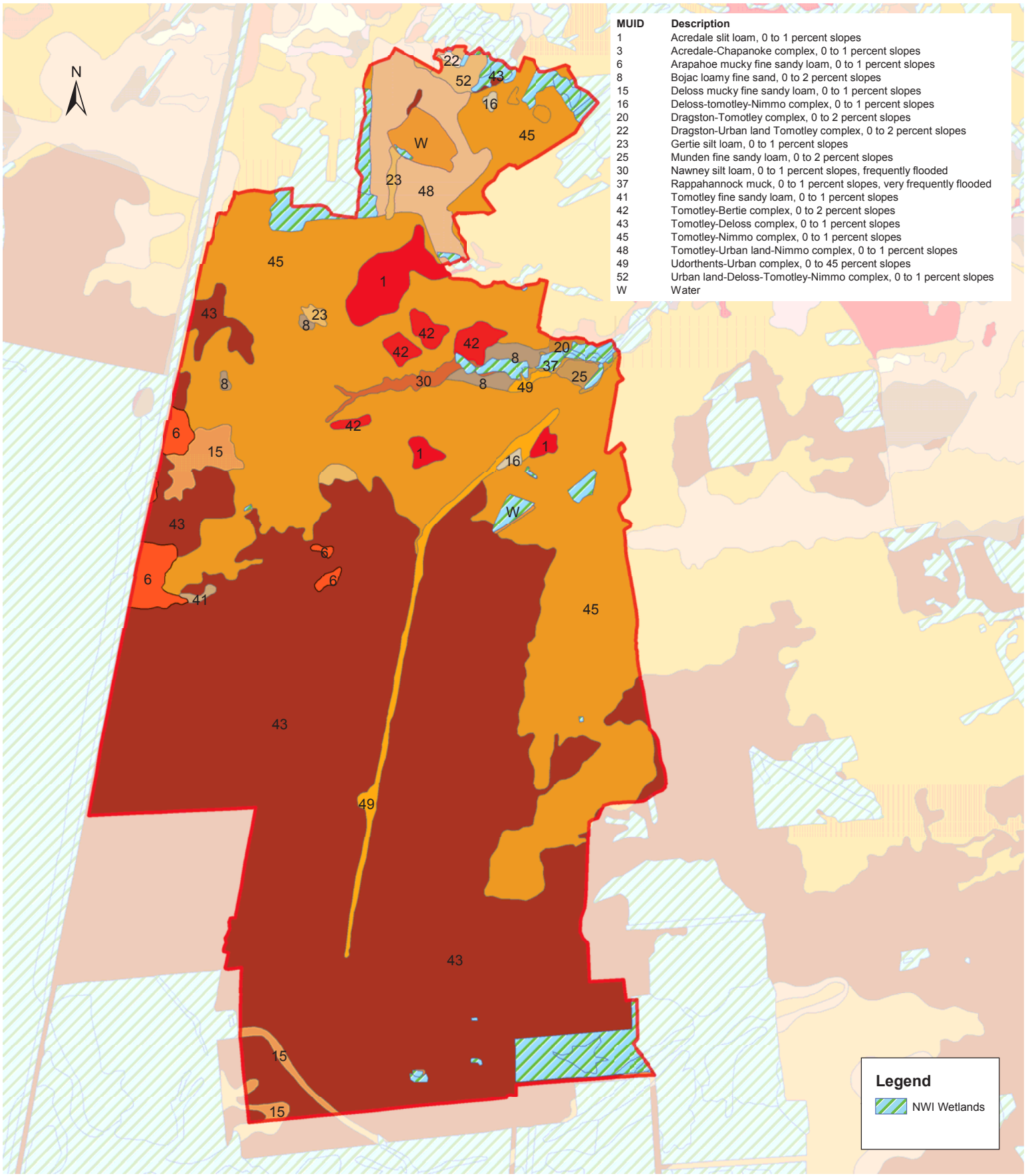


0 1,250 2,500
Feet

Aerial Imagery @ 2002 Commonwealth of Virginia.

See GIS for Complete Details

Figure 1. New Mill Creek Watershed MDPU Map



0 1,250 2,500

Feet

See GIS for Complete Details

Figure 2. Soils with Wetlands Overlay

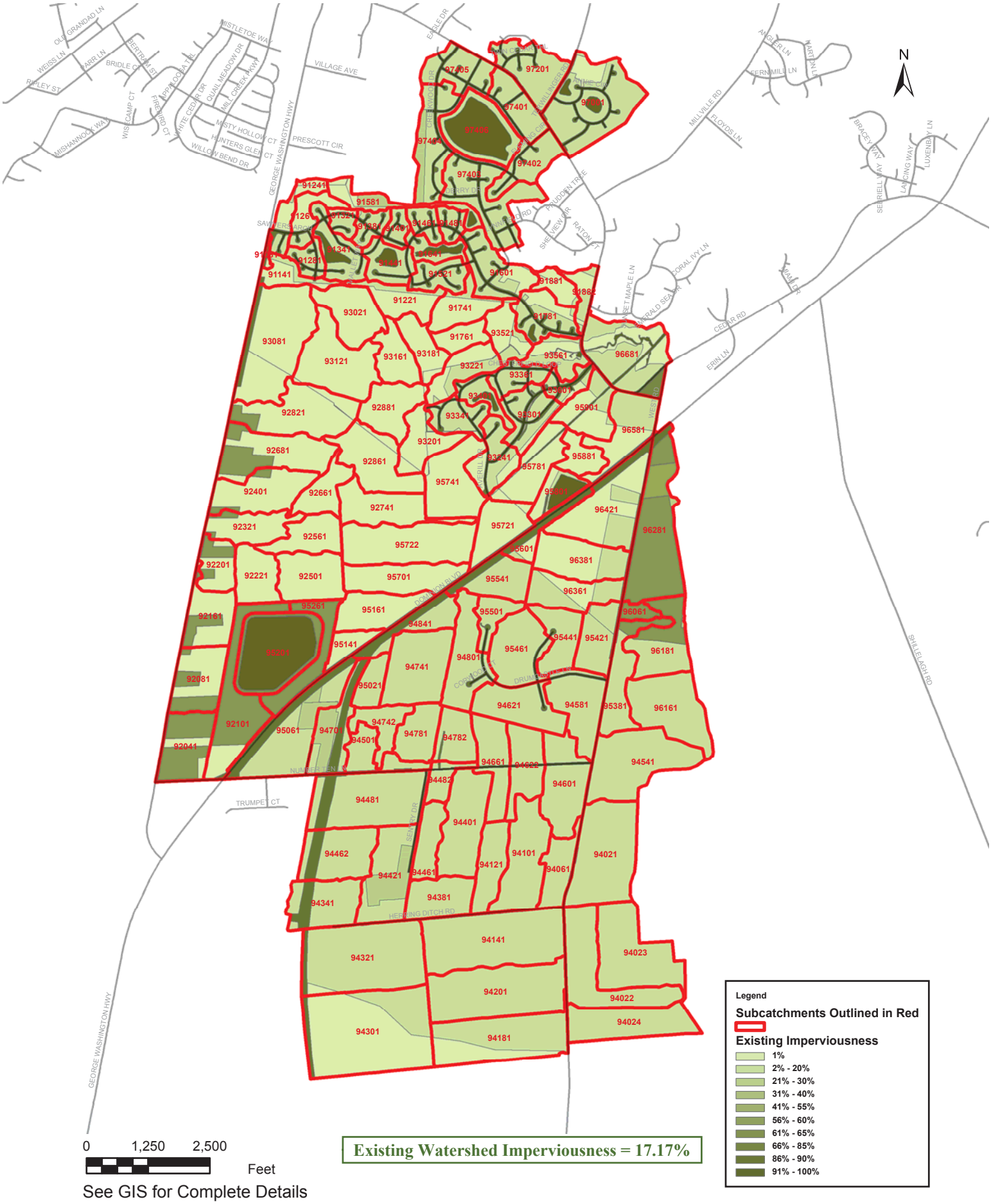


Figure 3. Existing Conditions Subcatchments with Shaded Imperviousness

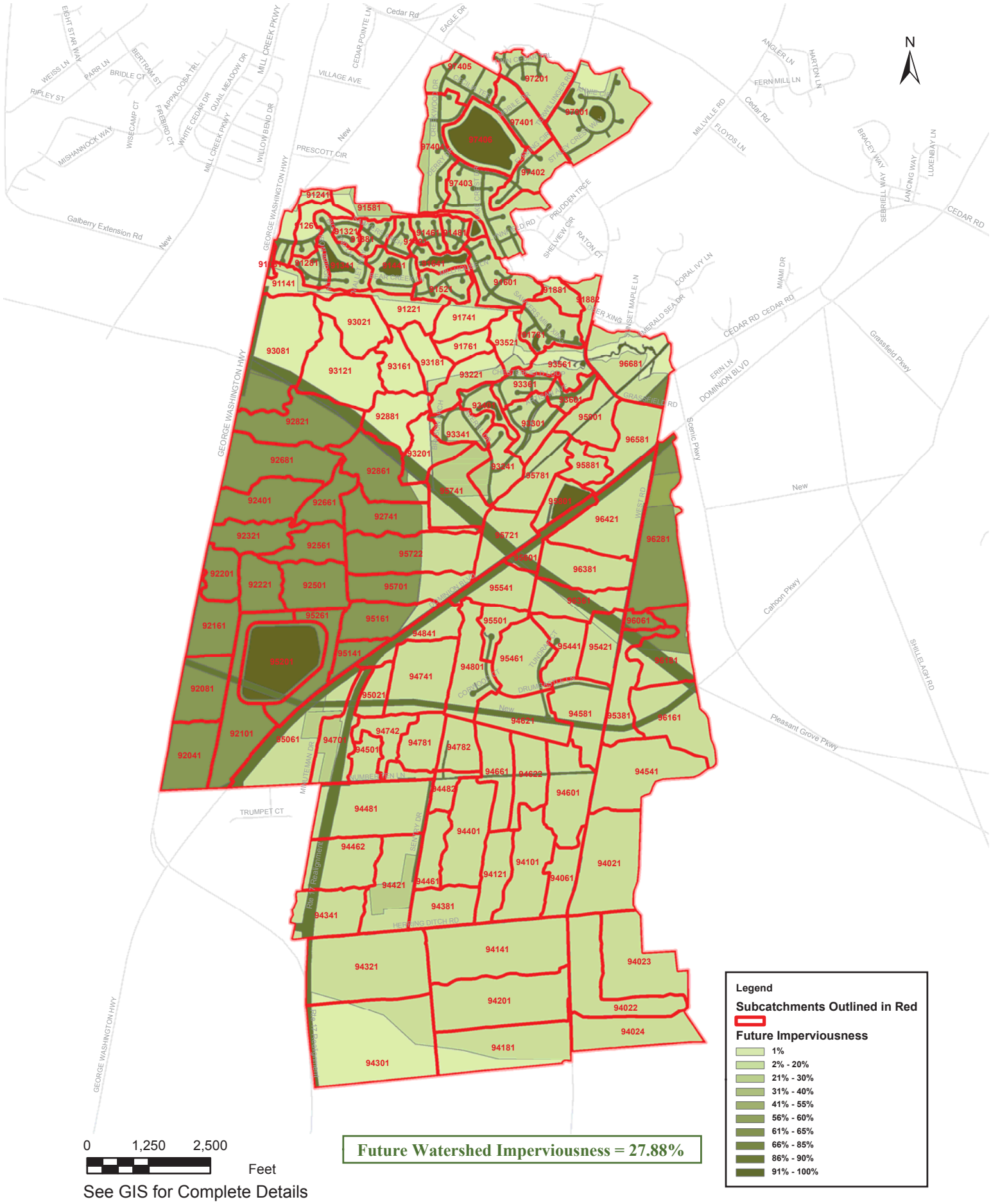
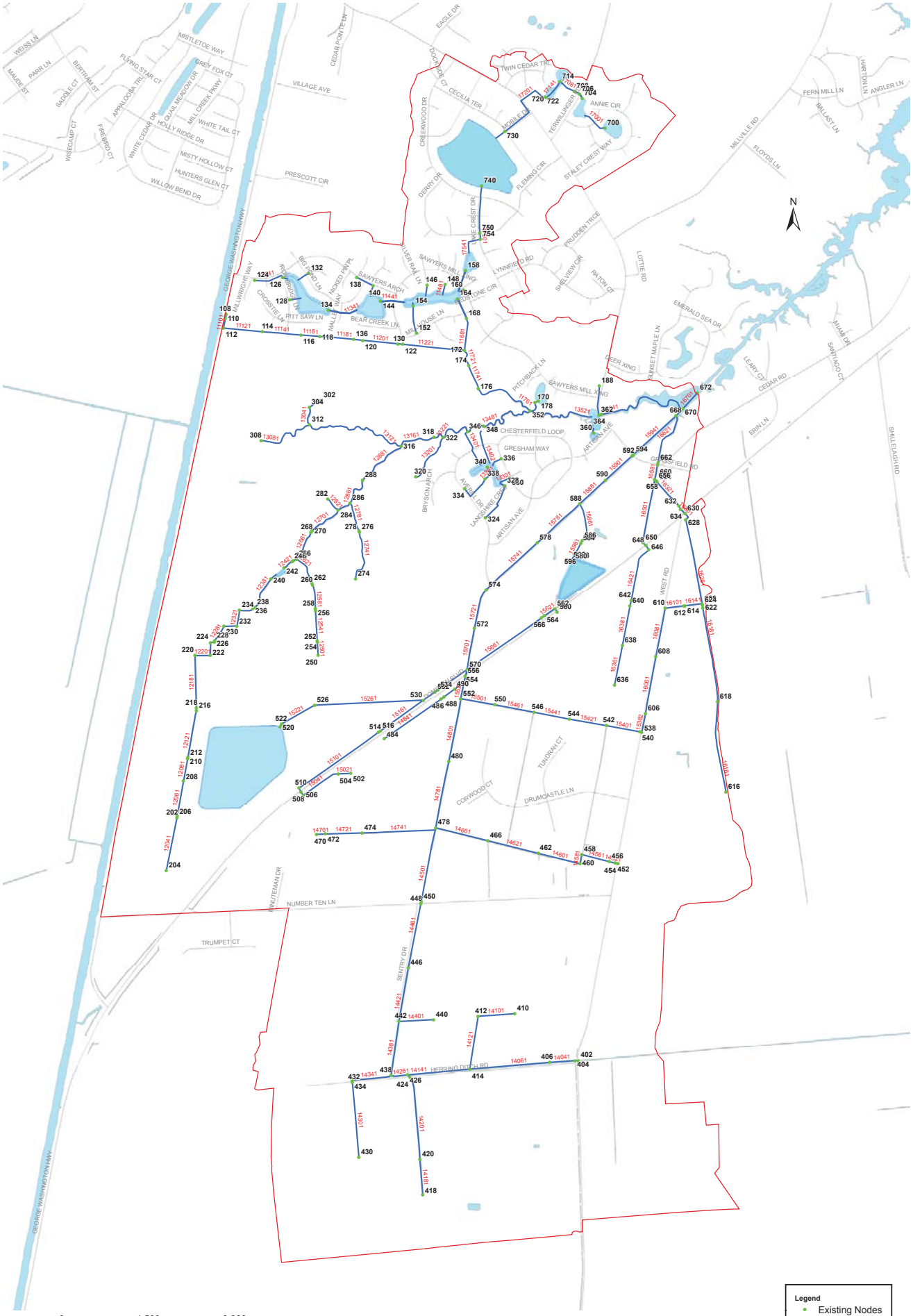
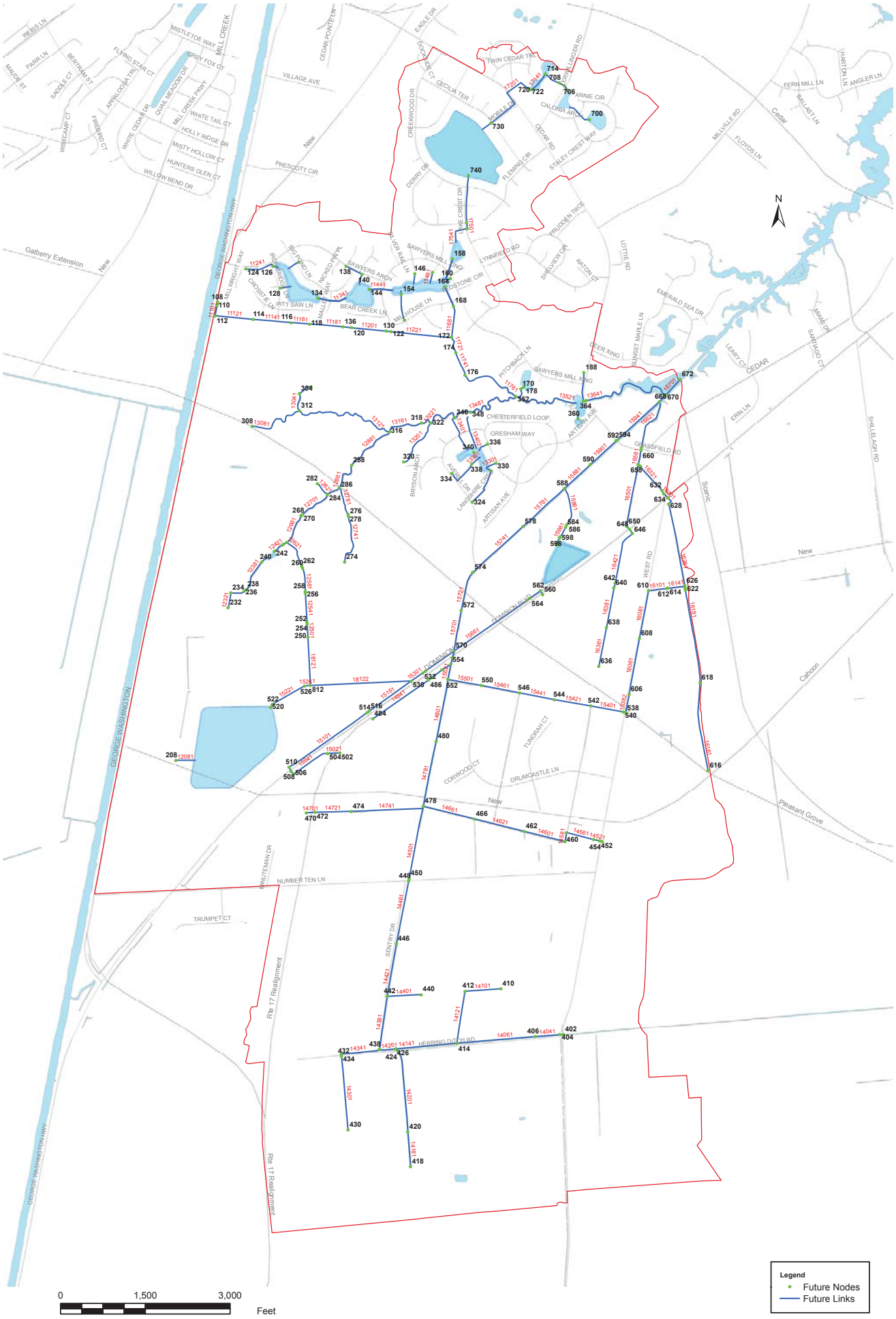


Figure 4. Future Conditions Subcatchments with Shaded Imperviousness



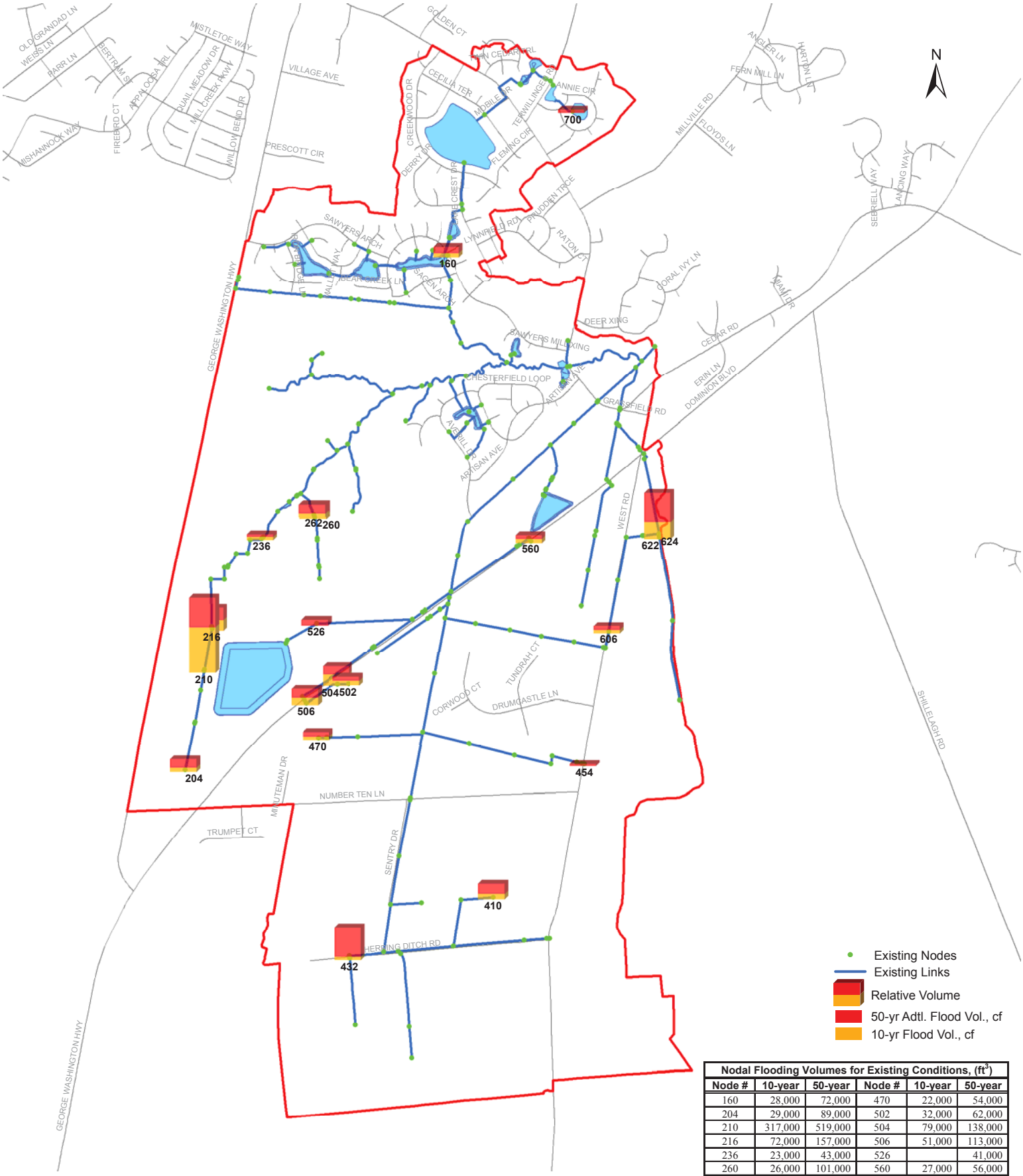
See GIS for Complete Details

Figure 5. Link-Node Diagram - Existing Conditions



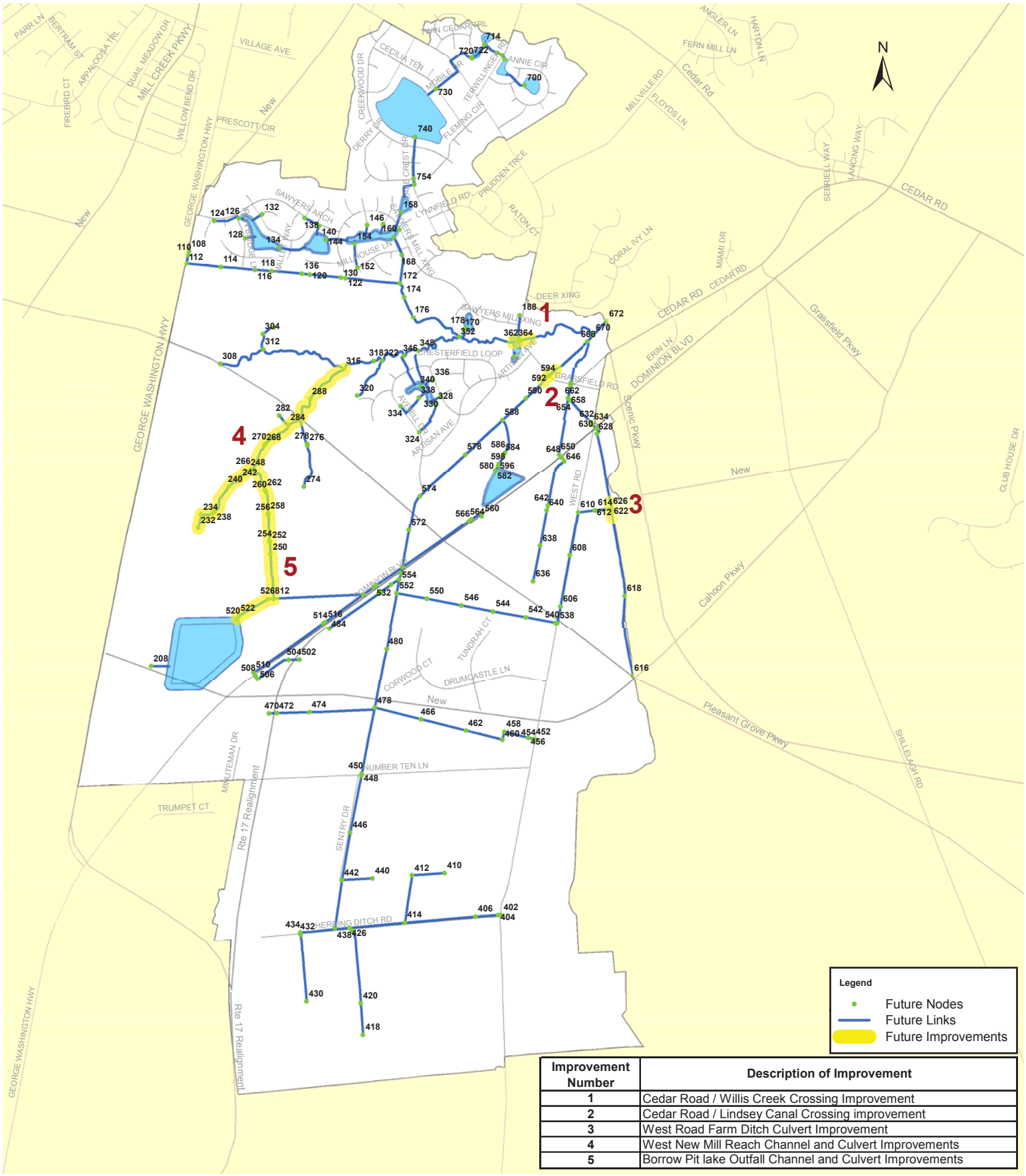
See GIS for Complete Details

Figure 6. Link-Node Diagram - Future Conditions



Nodal Flooding Volumes for Existing Conditions, (ft^3)					
Node #	10-year	50-year	Node #	10-year	50-year
160	28,000	72,000	470	22,000	54,000
204	29,000	89,000	502	32,000	62,000
210	317,000	519,000	504	79,000	138,000
216	72,000	157,000	506	51,000	113,000
236	23,000	43,000	526		41,000
260	26,000	101,000	560	27,000	56,000
262	22,000	86,000	606	23,000	50,000
410	36,000	105,000	622	118,000	318,000
432	22,000	228,000	624		23,000
454		15,000	700		25,000

Figure 7. Flooding for 10-Yr and 50-Yr Storms: Existing Hydrology, Existing Drainage



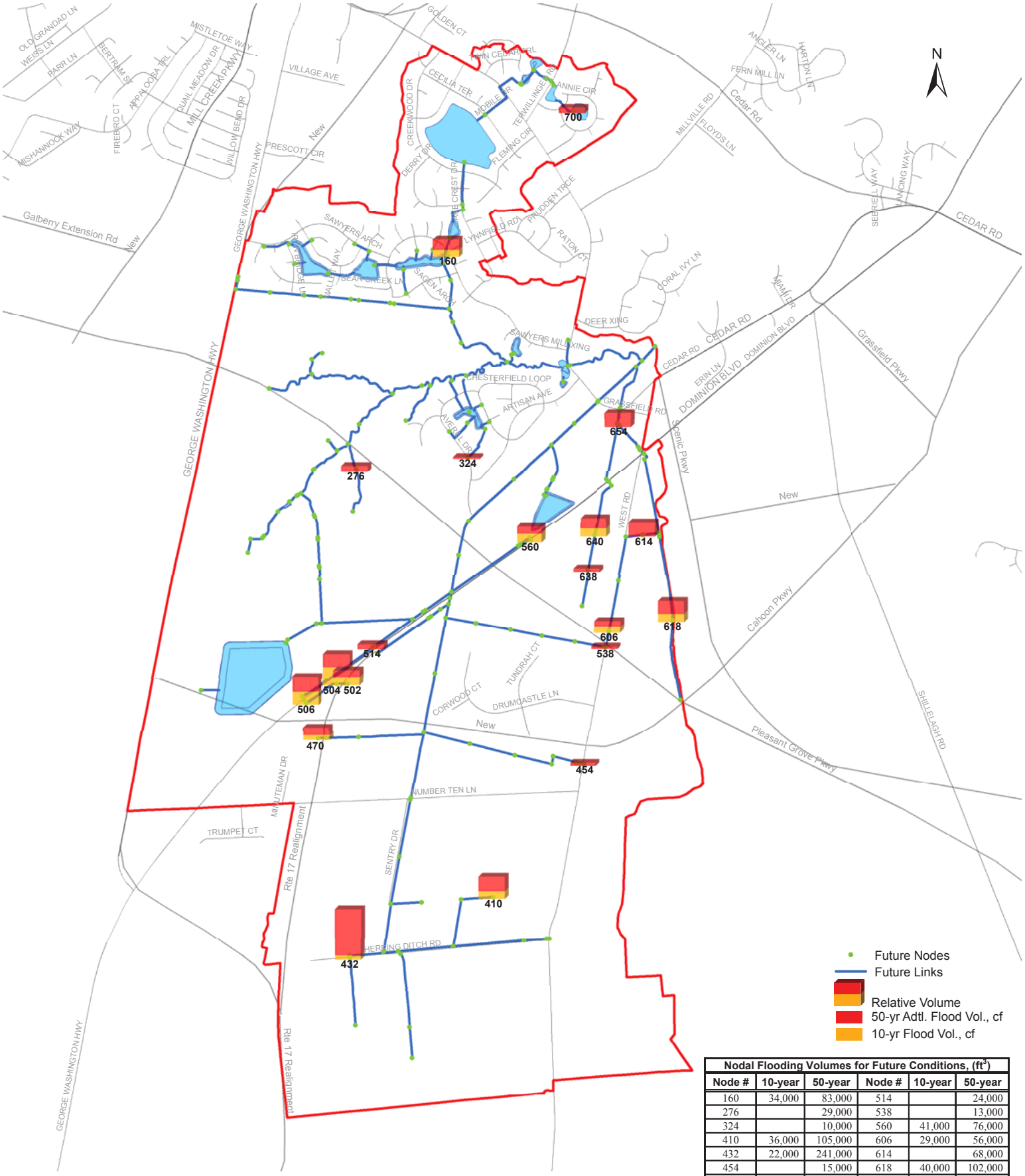
Improvement Number	Description of Improvement
1	Cedar Road / Willis Creek Crossing Improvement
2	Cedar Road / Lindsey Canal Crossing improvement
3	West Road Farm Ditch Culvert Improvement
4	West New Mill Reach Channel and Culvert Improvements
5	Borrow Pit lake Outfall Channel and Culvert Improvements

0 625 1,250 2,500

Feet

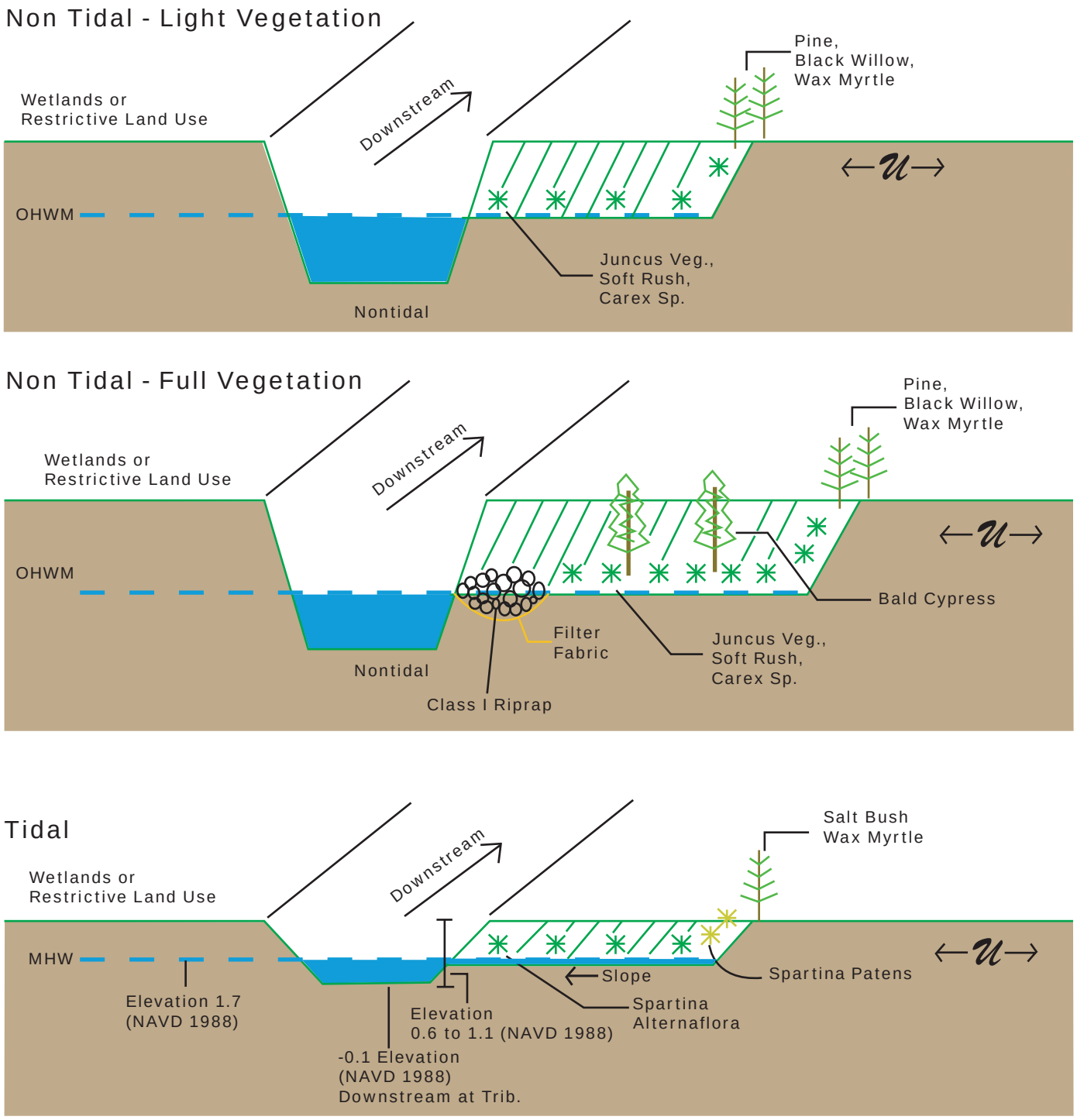
See GIS for Complete Details

Figure 8. Future Improvements



Nodal Flooding Volumes for Future Conditions, (ft^3)					
Node #	10-year	50-year	Node #	10-year	50-year
160	34,000	83,000	514		24,000
276		29,000	538		13,000
324		10,000	560	41,000	76,000
410	36,000	105,000	606	29,000	56,000
432	22,000	241,000	614		68,000
454		15,000	618	40,000	102,000
470	23,000	56,000	638		17,000
502	41,000	73,000	640	40,000	88,000
504	89,000	152,000	654		68,000
506	62,000	134,000	700		26,000

Figure 9. Flooding for 10-Yr and 50-Yr Storms: Future Hydrology, Future Drainage

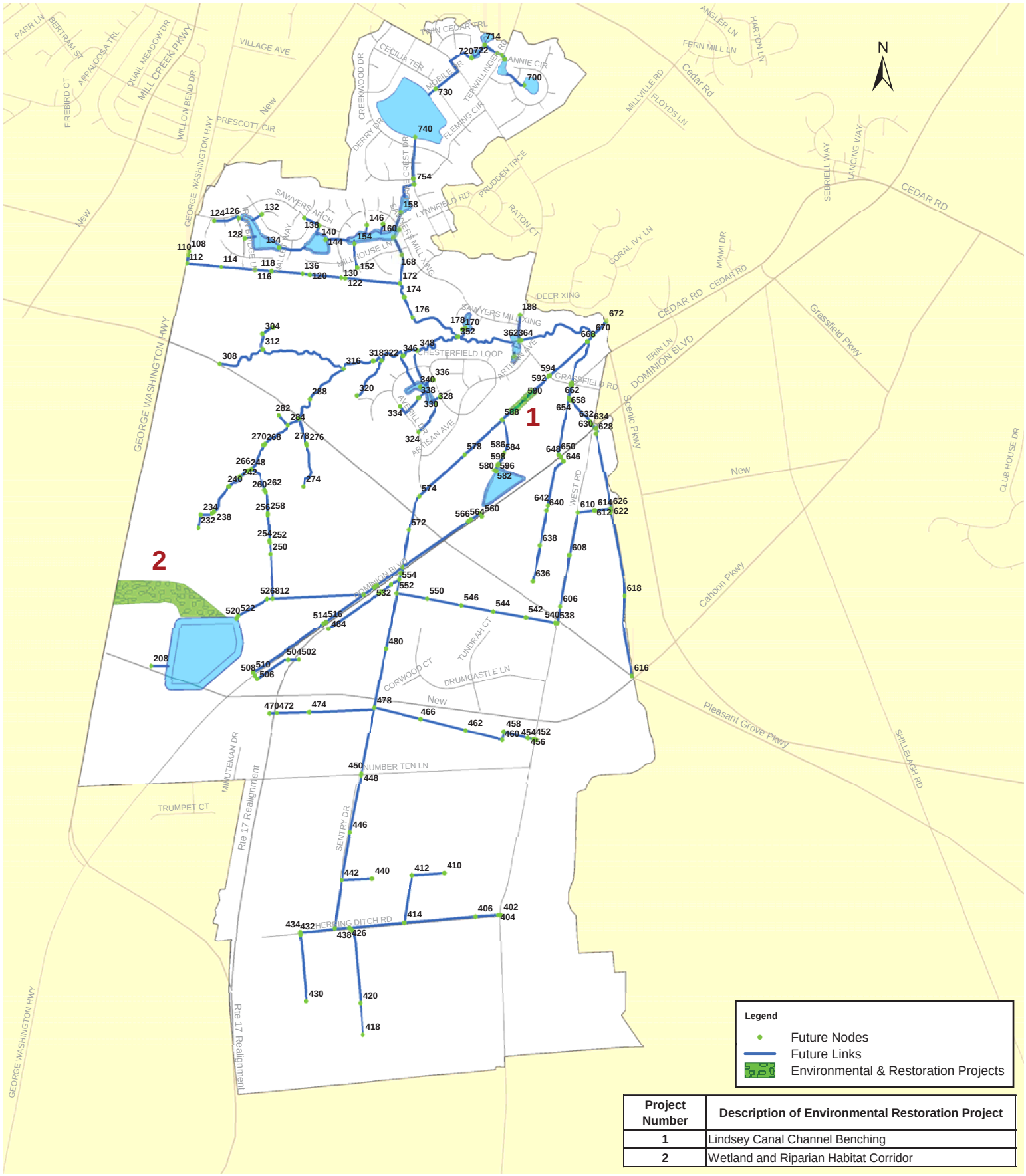


OHWM - Ordinary High Water Mark: Nontidal (Upper limits defines COE jurisdiction)

$\mathcal{U}$ - Uplands or Non-wetlands

MHW - Mean High Water - Tidal: Vegetation should be planted to drain between MHW (Elevation 1.7) and MLW (-0.1) [NAVD 1988]

Figure 10. Alternative Water Quality Design Improvements



Project Number	Description of Environmental Restoration Project
1	Lindsey Canal Channel Benching
2	Wetland and Riparian Habitat Corridor

0 625 1,250 2,500

Feet

See GIS for Complete Details

Figure 11. Potential Environmental Restoration and Protection Projects