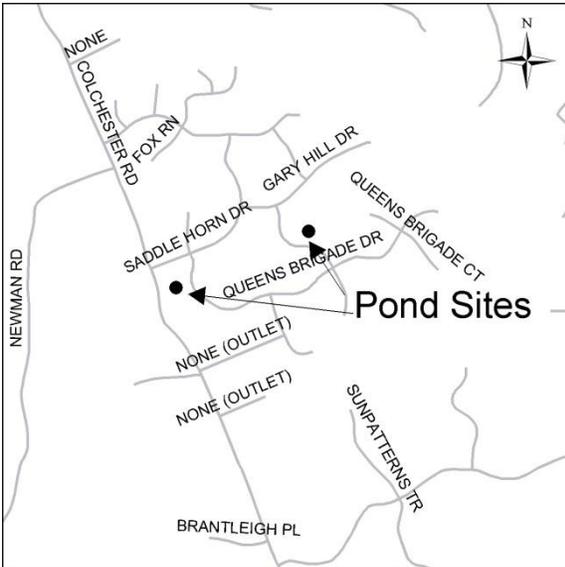


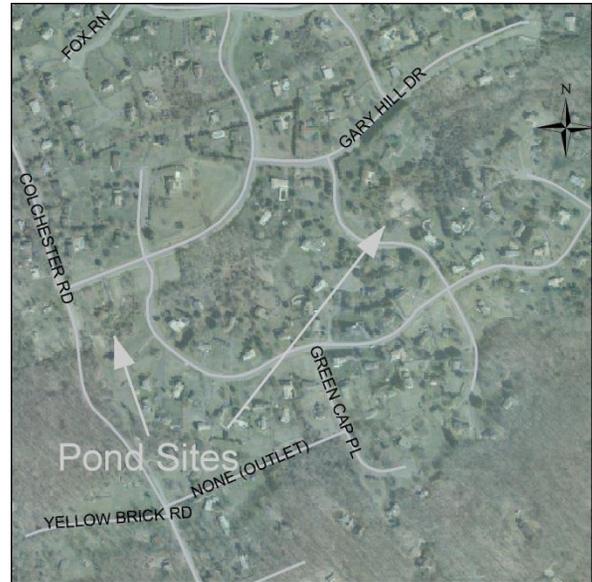
Appendix F: Stormwater Pond Retrofit Projects

Colchester Hunt Ponds

Facility Location: Colchester Hunt Subdivision
Type of Facility: Dry ponds.
Ownership: Public
Year Built: 1978
Tax Map Number: West: 0761 08 F; East: 0761 08 B
County Facility ID: West: 0123DP; East: 0019DP
Project ID: PH9130



Vicinity Map.



Pond Overview.



West pond

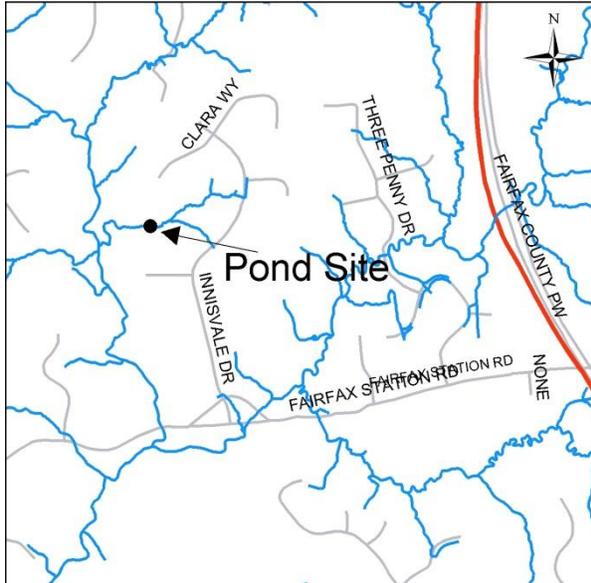


East pond

Drainage Area: 10 acres to east pond, 44 acres to west pond
Type of Control: Water quantity control.
Retrofit Possibilities: Modify outlet structures to provide water quality control.
Regrading and wetland plantings to enhance pollutant removal.
Benefit: Provide water quality control for uncontrolled areas.
Estimated Cost: \$140,000.

Innisvale Pond

Facility Location: West of Innisvale Road
 Type of Facility: Wet pond.
 Ownership: Fairfax County Park Authority.
 Year Built: Unknown.
 Tax Map Number: 0761 10 G2
 County Facility ID:
 Project ID: PH9131



Vicinity Map.



Pond Overview.



Pond view – looking downstream

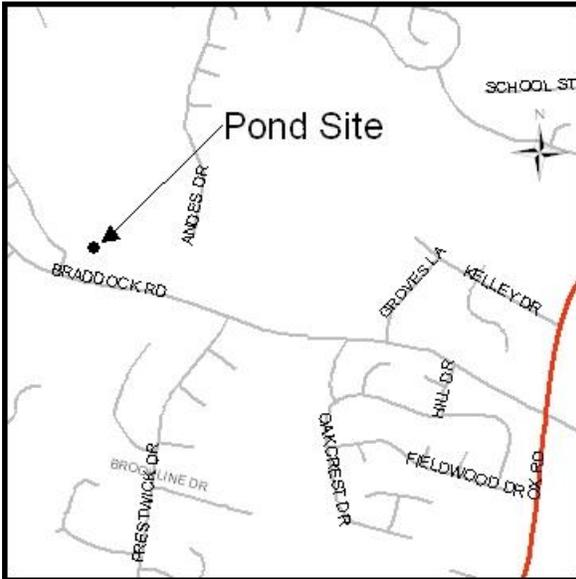


Dam Breach

Drainage Area: 38 acres.
 Type of Control: Wet pond with no apparent outlet structure.
 Retrofit Possibilities: Coordinate with FCPA to repair dam – remove trees – provide outlet structure.
 Benefit: Provide constructed wetland.
 Estimated Cost: \$190,000.

Braddock Road Pond

Facility Location: Braddock Road Near Groves Lane.
 Type of Facility: Dry pond.
 Ownership: Public (VDOT)
 Year Built:
 Tax Map Number: N/A.
 County Facility ID: N/A.
 Project ID: PH9170 (EF-SP-1)



Vicinity Map



Pond Overview



Pond basin from dam

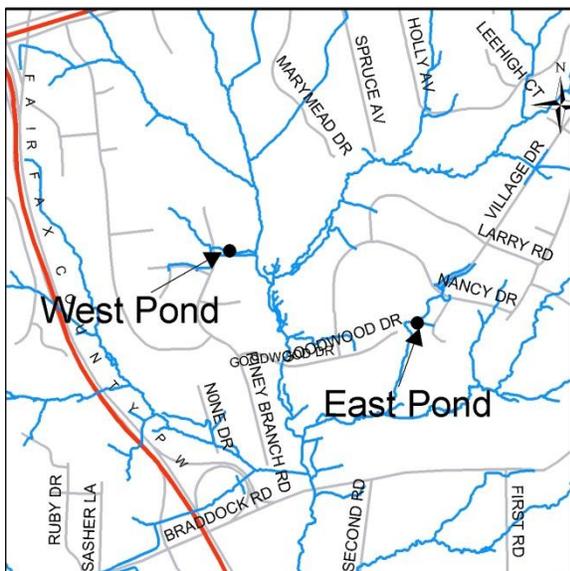


Pond riser

Drainage Area: 10 acres.
 Type of Control: BMP and water quantity control with riser.
 Retrofit Possibilities: Coordinate with VDOT to provide manufactured BMPs to treat runoff entering the pond and to ensure the pond is maintained. There is no space to enlarge or retrofit this pond.
 Benefit: Pond will function as designed and reduce peak flows.
 Estimated Cost: \$70,000.

Brentwood Ponds

Facility Location:	West Pond: East of Piney Branch Road; East Pond: East of Goodwood Drive
Type of Facility:	West pond: Dry; East Pond: Wet pond.
Ownership:	West pond: Public; East Pond: FCPA
Year Built:	Unknown.
Tax Map Number:	West: 0563 09 F; East: 0563 06 V
County Facility ID:	West: 0150DP; East: Unknown
Project ID:	PH9180



Vicinity Map.



Pond Overview.



West pond – looking downstream

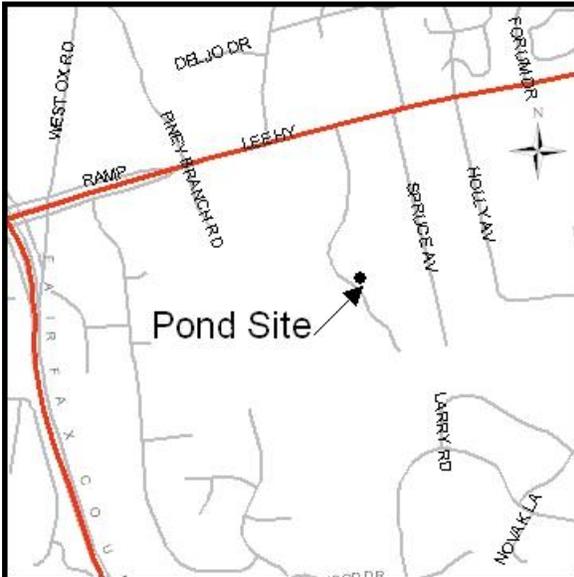


East pond – from dam looking upstream

Drainage Area:	West pond: 21 acres; East pond: 24 acres.
Type of Control:	West pond: pipe-no riser; East pond- no control structure.
Retrofit Possibilities:	West pond: provide riser and regrade for water quality control – add wetland plantings. East pond: Coordinate with FCPA to remove dam vegetation, add wetland plantings and sediment forebay to enhance pollutant removal efficiency
Benefit:	Increase pollutant removal efficiency.
Estimated Cost:	\$140,000.

Marymead Pond

Facility Location: 4805 Marymead Dr.
 Type of Facility: Dry pond.
 Ownership: Public.
 Year Built: 1984.
 Tax Map Number: 0563-11-E.
 County Facility ID: 0268DP.
 Project ID: PH9190 (PB-SP-3)



Vicinity Map.



Pond Overview.



Pond Overall.

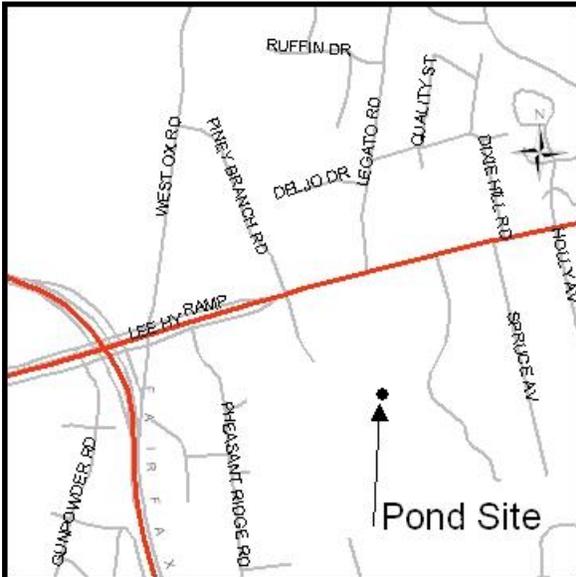


Eroding stream channel to pond.

Drainage Area: 60 acres.
 Type of Control: Quantity control with no structure.
 Retrofit Possibilities: Add water quantity control – 1-year extended drawdown. Increase surface area of pond. Increase vegetated buffer around pond and along stream channel.
 Benefit: Add pollutant removal to pond, increase pollutant filtering through buffers.
 Estimated Cost: \$560,000.

Merrifield Gardens Pond

Facility Location: Route 29, on the back of the Merrifield Gardens property.
 Type of Facility: Wet pond.
 Ownership: Private.
 Year Built: 1987.
 Tax Map Number: 0563-01-0013.
 County Facility ID: N/A.
 Project ID: PH9191 (PB-SP-4)



Vicinity Map.



Pond Overview.



Looking at pond and dam.

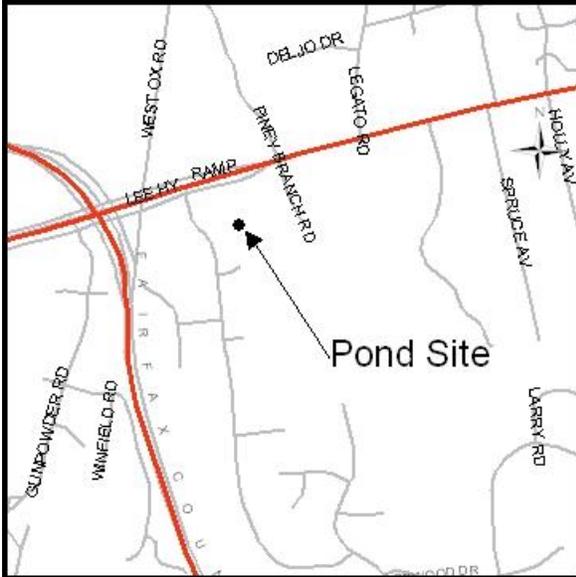


Looking from dam, note trucks on pond edge.

Drainage Area : 48 acres – 33 acres controlled.
 Type of Control: BMP and water quantity control with riser.
 Retrofit Possibilities: Increase and vegetate buffer around pond and inflow channel.
 Install filtering device for oil/fuel/sediments draining to pond.
 Add wetland plantings to pond.
 Benefit: Increase pollutant removal efficiency of facility, remove oil and other urban pollutants before entering pond.
 Estimated Cost: \$70,000.

FCPA-Piney Branch Park Pond

Facility Location: Piney Branch Stream Valley Park (Route 29 & Pheasant Ridge Rd).
 Type of Facility: Dry pond.
 Ownership: Public (VDOT)
 Year Built:
 Tax Map Number: 0563-01-0012.
 County Facility ID: N/A.
 Project ID: PH9192 (PB-SP-2)



Vicinity Map.



Pond Overview.



Pond and riser structure.

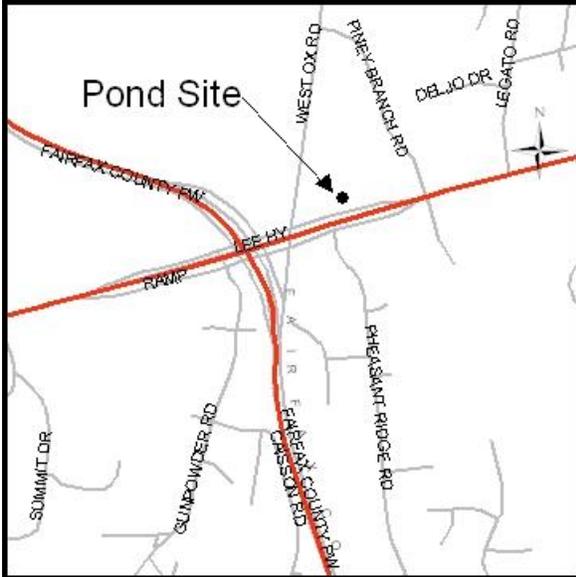


Pond basin.

Drainage Area: 64 acres – can be regraded to capture additional 22 acres.
 Type of Control: BMP and water quantity control with riser.
 Retrofit Possibilities: Coordinate with FCPA and VDOT to pursue project. Install sediment forebay at inflow point. Convert to stormwater wetland system. Install micropool at riser structure. VDOT should provide the appropriate maintenance to prevent clogging.
 Benefit: Increase pollutant removal efficiency of facility by 15%.
 Estimated Cost: \$720,000.

Sports Authority Pond

Facility Location: South side of Sports Authority in the Costco Plaza.
 Type of Facility: Wet pond.
 Ownership: Private.
 Year Built: 1991.
 Tax Map Number: 0563-01-0005-D.
 County Facility ID: N/A.
 Project ID: PH9193 (PB-SP-6)



Vicinity Map.



Pond Overview.



Pond basin from dam.

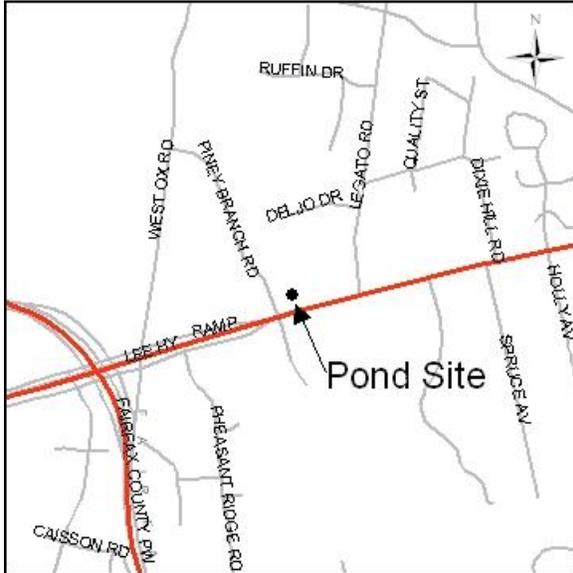


Location of water level control structure.

Drainage Area: 38 acres.
 Type of Control: Quantity control with riser, BMP in pond.
 Retrofit Possibilities: Pretreatment of parking lot runoff – 2 manufactured BMPs.
 Benefit: Remove oil and other urban pollutants before entering pond.
 Estimated Cost: \$120,000.

Piney Branch Road Extension Pond

Facility Location: Piney Branch Road & Route 29.
Type of Facility: Dry pond.
Ownership: Private.
Year Built: 1991.
Tax Map Number: 0561-16-B2.
County Facility ID: N/A.
Project ID: PH9194 (PB-SP-5)



Vicinity Map.



Pond Overview.



Pond Riser.

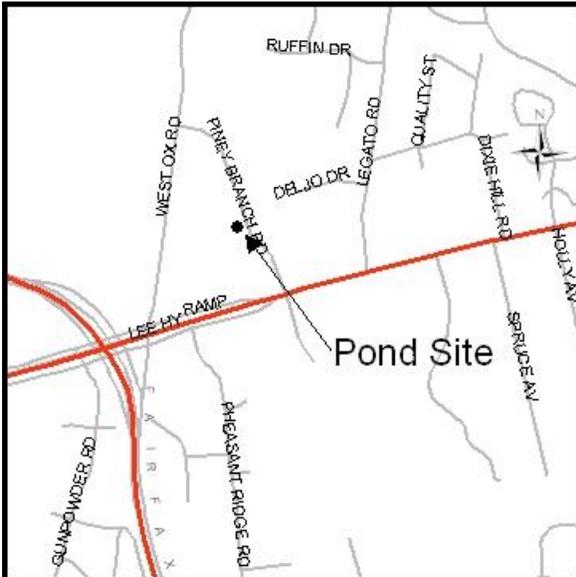


Looking at pond from Riser.

Drainage Area: 23 acres.
Type of Control: BMP and water quantity control with riser.
Retrofit Possibilities: Pretreatment of road and parking lot runoff – 2 manufactured BMPs.
Benefit: Remove oil and other urban pollutants before entering pond.
Estimated Cost: \$120,000.

Costco East Pond

Facility Location: East of Costco in the Costco Plaza.
Type of Facility: Dry pond.
Ownership: Private.
Year Built: 1991.
Tax Map Number: 0561-01-0005-C.
County Facility ID: N/A.
Project ID: PH9195 (PB-SP-1)



Vicinity Map.



Pond Overview.



Pond basin.

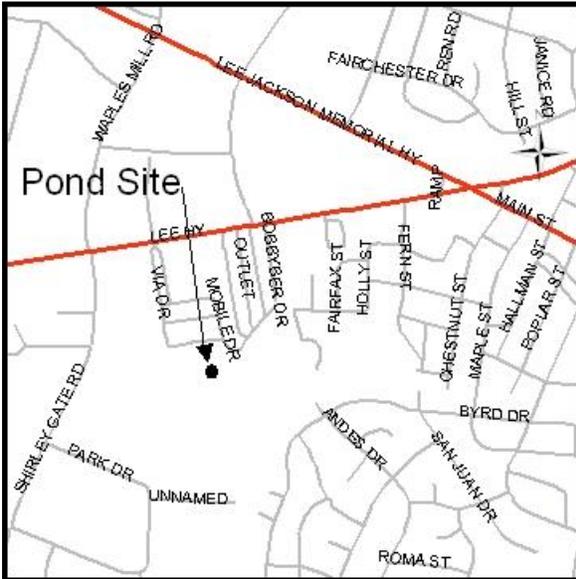


Pond from parking lot.

Drainage Area: 7 acres.
Type of Control: BMP and water quantity control with riser.
Retrofit Possibilities: Pretreatment of parking lot runoff – 2 manufactured BMPs .
Benefit: Remove oil and other urban pollutants before entering pond.
Estimated Cost: \$120,000.

Waples Mobile Home Park Pond

Facility Location: Waples Mobile Home Park, on Via Drive.
 Type of Facility: Dry pond.
 Ownership: Private.
 Year Built: 1993.
 Tax Map Number: 0562-01-0046.
 County Facility ID: WP0047.
 Project ID: PHP9196 (UP-SP-1)



Vicinity Map.



Pond Overview.



Riser basin (recently maintained).



Pond from riser structure.

Drainage Area: 62 acres.
 Type of Control: BMP and water quantity control with riser.
 Retrofit Possibilities: Install sediment forebay. Provide 1-year extended detention.
 Install micropool at riser.
 Convert to stormwater wetland system.
 Benefit: Increase pollutant removal efficiency of facility by 15%.
 Estimated Cost: \$930,000.