

**APPENDIX A**

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**List of Data Sources**



## List of Information Sources by Topic May 19, 2010

### Inventory GIS Map Folio Data Sources

#### ***City of Milton (obtained from Gray and Osborn Inc.)***

- Aerial photograph (July 2009)
- Lakes, streams, wetlands
- City and UGA boundary
- Impervious surfaces (partially complete)
- Parcels
- Zoning
- Streets
- Stormwater
- Parks and other public access

#### ***Ecology (<http://www.ecy.wa.gov/services/gis/data/data.html>)***

- Lakes
- Existing/suggested shoreline streams/rivers/lakes
- 2008 Washington Water Quality Assessment 303(d)

#### ***King County***

- County boundary
- Parks and other public access

#### ***Pierce County***

- County boundary
- Parks and other public access

#### ***WDFW:***

- Priority habitats and species (April 8, 2010)

#### ***NOAA***

- Coastal Change Analysis Program (CCAP) Regional Land Cover (vegetation)

#### ***USGS***

- Impervious Surface

#### ***Natural Resources Conservation Service***

- Soils (<http://soildatamart.nrcs.usda.gov/Survey.aspx?County=WA053>)

## **Additional Characterization Data Sources - Preliminary**

### ***Multi-Topic General Reference Materials***

- Adolfson Associates. 2003. Shoreline Characterization. Prepared for the City of Milton. June 2003.
- City of Milton. 2003. City of Milton Comprehensive Land Use Plan.
- ESA Adolfson. 2008. Pierce County Shoreline Master Program Update Project: Shoreline Restoration Plan. Prepared for Pierce County Planning and Land Services Department. Pierce County, WA.
- ESA Adolfson. 2009. Pierce County Shoreline Master Program Project, Final Shoreline Inventory and Characterization Report. June. Prepared for Pierce County Planning and Land Services Department. Pierce County, WA.
- Kerwin, J. 1999. Salmon Habitat Limiting Factors Report for the Puyallup River Basin (Water Resource Inventory Area 10). Washington Conservation Commission. July 1999.
- King County Surface Water Management and City of Federal Way. Hylebos Creek and Lower Puget Sound Basins, Current and Future Conditions Report, July 1990, <http://your.kingcounty.gov/dnrp/library/1990/kcr772/part1.pdf>
- Pierce County. 2008. Salmon Habitat Protection and Restoration Strategy: WRIA-10 Puyallup Watershed and WRIA -12 Chambers/Clover Creek Watershed. March 2008.
- Washington Department of Ecology. 2008. Urban Waters Initiative, 2008: Sediment Quality in Commencement Bay. April 2010. Publication Number 10-03-019.

### ***Critical Areas***

- City of Federal Way. Surface Water Quality Monitoring for Hylebos Creek. <http://www.cityoffederalway.com/Page.aspx?page=497>
- King County. 2002. East Hylebos Creek 2001 Monitoring Program Final Report. King County Department of Natural Resources and Parks Water and Land Resources Division. July 2002.
- Puyallup Tribe. Puyallup Tribal Fisheries 2008-2009 Annual Salmon, Steelhead, and Bull Trout Report. <http://www.scribd.com/doc/24871468/Puyallup-Tribal-Fisheries-2008-2009-Annual-Salmon-Steelhead-and-Bull-Trout-Report-Introduction>

Washington Department of Fish and Wildlife. Salmonscape.  
<http://wdfw.wa.gov/mapping/salmonscape/index.html>

Washington Department of Fisheries, Washington Department of Wildlife, and Western Washington Treaty Indian Tribes. 1993. 1992 Washington State salmon and steelhead stock inventory. March 1993. Olympia, WA. 212 p.

Williams, R.W., R.M. Laramie, and J.J. Ames. 1975. A Catalog of Washington Streams and Salmon Utilization, Vol. 1, Puget Sound Region. Washington Department of Fisheries.

### ***Floodplains and Channel Migration Zones***

Federal Emergency Management Agency (FEMA). 1987. Flood Insurance Rate Map (FIRM). Town of Milton, Washington. Community Panel Number 5302940001 A.

Pierce County. 2008. Pierce County Flood Risk Assessment. Pierce County Public Works and Utilities Water Programs Division.  
<http://www.co.pierce.wa.us/pc/services/home/environ/water/ps/basinplans/floodriskassessment.htm>

### ***Historical or Archaeological Sites***

DAHP records search by Consultant.

Washington Department of Archaeology & Historic Preservation.  
<https://fortress.wa.gov/dahp/wisaard/>

### ***Confirmed and Suspected Contaminated Sites***

U. S. Environmental Protection Agency  
<http://yosemite.epa.gov/r10/cleanup.nsf/7d19cd587dff1eee8825685f007d56b7/38f056fc02715e7588256b1300631cb4?opendocument>

Washington Department of Ecology.  
[http://www.ecy.wa.gov/programs/tcp/sites/SiteLists\\_CSCSinstr.htm](http://www.ecy.wa.gov/programs/tcp/sites/SiteLists_CSCSinstr.htm)

### ***Restoration Planning***

City of Federal Way. Hylebos Creek Headwaters Restoration Project.  
<http://www.cityoffederalway.com/Page.aspx?page=1749>

N.O.A.A. Damage Assessment, Remediation, and Restoration Program  
<http://www.darrp.noaa.gov/northwest/cbay/restore.html>

N.O.A.A. Natural Resource Damage Assessment and Restoration  
[http://www.cbrestoration.noaa.gov/hylebos\\_offchannel.html](http://www.cbrestoration.noaa.gov/hylebos_offchannel.html)

Port of Tacoma. Lower Hylebos Creek Restoration

<http://www.portoftacoma.com/hylebos-creek>

Washington Department of Fish and Wildlife. 2009. Land Use Planners Guide to Salmon Protection and Recovery. October 2009.

<http://wdfw.wa.gov/habitat/plannersguide/index.html>

Washington State Department of Transportation. (DRAFT) Analysis of the SR-167 Extension and Riparian Restoration Proposal in the Hylebos Watershed: Hydrology, Hydraulics and Geomorphology, October 2004.

### **Preliminary Data Gaps**

Topography, currently not available

Overwater structures (piers, docks, etc.), not available in digitized format

Shoreline armoring along Surprise Lake, not available in digitized format

Channel Migration Zone mapping

Sewer system, not yet attained from the Counties

**APPENDIX B**

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**Information Request Letter and  
Distribution List**





April 6, 2010

**RE: City of Milton Shoreline Inventory and Assessment, request for existing information: Surprise Lake and Hylebos Creek**

Dear Stakeholders:

The City of Milton is in the early stages of examining its Surprise Lake and Hylebos Creek shorelines for the purposes of updating its Shoreline Master Program per requirements of the Washington State Department of Ecology. We have recently hired a consultant team to assist with shoreline characterization, analysis, and regulatory review. The products of the inventory/analysis include a map portfolio and a report characterizing ecological functions and ecosystem-wide processes, among other things.

The City is requesting your help in obtaining all relevant existing physical and biological information regarding this waterbody; the associated riparian and wetland areas; and other relevant watershed or basin information. We are interested in any and all inventories, assessments, water quality analyses, and/or fish and wildlife distribution and habitat information. A map identifying the City's Shoreline is attached.

We are hoping to assemble our inventory by May 28, 2010 in order to complete the necessary characterization and analysis, and resultant recommendations, in a timely manner. A response would be appreciated by April 30, 2010. If possible, please provide hard copies or electronic files of any studies instead of a list of citations; contact the City if a copy fee is required. If you believe that another individual within your organization would be a more appropriate contact for this solicitation, please forward this letter to that individual, and notify us of the change in contact.

If you have any questions, would like to remain on the City's mailing list for future notifications related to this project, or need additional information, please feel free to contact me at (253) 517-2715 or [clarson@cityofmilton.net](mailto:clarson@cityofmilton.net).

Sincerely,

Chris Larson, Planner 1  
City of Milton  
253-517-2715

Encl.

**Planning & Community Development  
1000 Laurel St. Milton, WA 98354-8850  
Ph 253.922.8738 / Fax 253.922.3466**

## **Distribution List for City of Milton Shoreline Master Program Inventory**

Adopt-A-Stream  
600 128th St. SE  
Everett WA 98208

Attn: Troy Fields, Executive Director  
7400 Sand Point Way NE, Suite 202N  
Seattle, WA 98115

American Rivers  
Northwest Regional Office  
4005 20th Avenue West, Suite 221  
Seattle, WA 98199

Muckleshoot Indian Tribe  
Attn: Karen Walters  
39015 - 172nd Avenue Southeast  
Auburn, WA 98092

Cascade Bicycle Club  
PO Box 15165  
Seattle, WA 98115

National Marine Fisheries Service  
Attn: Tom Sibley  
7600 Sand Point Way NE  
Seattle, WA 98115

Cascade Land Conservancy  
615 Second Avenue, Suite 525  
Seattle WA 98104

Pierce Conservation District  
P.O. Box 1057  
Puyallup, WA 98371

City of Edgewood  
2224 104th Avenue East  
Edgewood, WA 98372

Pierce County  
Planning and Land Services  
2401 S. 35<sup>th</sup> Street  
Tacoma, WA 98409

City of Federal Way  
PO BOX 9718  
Federal Way, WA 98063-9718

Pierce County  
Public Works and Utilities  
2702 South 42<sup>nd</sup> Street, Suite 201  
Tacoma, WA 98409

City of Fife  
5411 23rd Street East  
Fife, WA 98424

Puget Sound Partnership  
P.O. Box 40900  
Olympia, Washington 98504-0900

City of Tacoma  
747 Market Street  
Tacoma, WA 98402

Friends of Hylebos  
PO Box 24971  
Federal Way, WA 98093

Puyallup Tribe of Indians  
3009 E. Portland Ave.  
Tacoma, WA 98404

Futurewise  
Attn: Dean Patterson  
814 Second Ave, Suite 500  
Seattle, WA 98104

Rainier Audubon Society  
Attn: Nancy Hertzell, President  
PO Box 778  
Auburn, WA 98071

King Conservation District  
1107 SW Grady Way, Suite 130  
Renton, WA 98057

Shared Strategy for Puget Sound  
1411 4th Avenue, Suite 1015  
Seattle, WA 98101

King County Department of Natural  
Resources and Parks,  
Water and Land Resources Division  
Attn: Mary Maier, Basin Steward  
201 S. Jackson Street, Suite 600  
Seattle, WA 98104

Stream Team  
P.O. Box 1057  
Puyallup, WA 98371

Mid Puget Sound Fisheries Enhancement  
Group

Trout Unlimited  
Tacoma Chapter #146  
P.O. Box 98044  
Lakewood, WA 98496

U.S. Army Corps of Engineers  
Seattle District  
P.O. Box 3755  
Seattle, WA 98124-3755

U.S. EPA Region 10  
1200 6th Avenue  
Seattle, WA 98101

U.S. Fish and Wildlife Service  
510 Desmond Drive, Suite 102  
Lacey, WA 98503-1263

University of Washington  
Center for Water and Watershed Studies  
Box 352100  
Seattle WA 98195-2100

University of Washington  
School of Aquatic & Fishery Sciences  
Attn: Si Simenstad  
Box 357980  
Seattle, WA 98195  
simenstd@u.washington.edu

Washington Department of Ecology  
Attn: Sarah Lucas  
PO Box 47775  
Olympia, WA 98504-7775

Washington Department of Fish and Wildlife  
Attn: Doug Hennick  
16018 Mill Creek Boulevard  
Mill Creek, WA 98012-1296

Washington Department of Fish and Wildlife  
Attn: Lori Guggenmos  
Priority Habitats and Species Program  
600 Capitol Way North  
Olympia, Washington 98501-1091

Washington Department of Fish and Wildlife  
Attn: Katie Knight, SMP Reviewer  
600 Capitol Way  
Olympia WA 98501

Washington Department of Natural  
Resources  
Attn: Sandy Swope Moody  
Natural Heritage Program  
PO Box 47014

Olympia WA 98504-7014  
(360) 902-1667

Washington Department of Natural  
Resources  
Attn: Hugo Flores  
Aquatic Resources Division  
PO Box 47027  
Olympia, WA 98504-7027

Washington State Department of Natural  
Resources  
Attn: Boyd Powers, External SEPA  
Coordinator  
PO Box 47015  
Olympia, WA 98504-7015

Washington Trails Association  
2019 Third Avenue, Suite 100  
Seattle, WA 98121

Wild Fish Conservancy  
P.O. Box 402  
Duvall WA 98019



**APPENDIX C**

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**Assessment of Shoreline Jurisdiction**



April 8, 2010

Chris Larson  
City of Milton  
1000 Laurel Street  
Milton, WA 98354

Re: Ecology Comments in Response to the City of Milton's Shoreline Master Program Grant Deliverables for Phase One.

Dear Mr. Larson,

Thank you for submitting the Phase One deliverables to the Department of Ecology (Ecology) in a timely manner. I reviewed the submitted deliverables for Phase One, of the Shoreline Master Program (SMP) Grant Agreement; this letter acts as Ecology's comments in response to the Preliminary Shoreline Maps and Narrative, Public Participation Plan, and SMP Submittal Checklist.

#### Preliminary Shoreline Maps

The submitted maps do not include the entirety of regulated shoreline jurisdiction associated to Hylebos Creek. As mapped, the shoreline area terminates at the confluence of West Hylebos Creek and Hylebos Creek. Shoreline jurisdiction associated to this area should include the associated wetlands, mapped floodway, and contiguous floodplain plus two hundred feet **in all directions**, including the shorelands extending past the confluence of the two creeks according to 90.58.030(2)(f),

"Shorelands" or "shoreland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology."

In review of the suite of shoreline maps submitted to Ecology, the map should be edited to include the shorelines within 200 feet of the mapped floodway and contiguous floodplain, as well as the mapped wetland(s) associated to the confluence of the two streams.

#### Preliminary Shoreline Narrative

The submitted narrative identifies the City's intent not to plan for shoreline jurisdiction within the City's Urban Growth Areas. In review of the City's Urban Growth Area Maps, there is a portion of Hylebos Creek located in this area. If annexed, the shoreline areas will continue to be regulated to Pierce County's SMP and a SMP amendment will be required within one year according to WAC 173-26-150 thru 173-26-160. Although

discretionary, Ecology recommends that Milton utilize the allocated grant resources to plan in this area.

### Public Participation Plan

The submitted Plan recognizes that key groups, affected tribes and agencies, as well as interested members of the public will be part of the outreach process, but does not specify who these groups, agencies, tribes and members of the public are. Please identify the specific groups, tribes, agencies, and members of the public to be notified.

### The SMP Submittal Checklist

The submitted checklist meets the requirements as of Phase One of the Grant Process.

Thank you for the opportunity to comment on the Phase One deliverables. If you have questions or comments regarding this letter please contact me. I can be reached at (360) 407-7459, or by email at [sarah.lukas@ecy.wa.gov](mailto:sarah.lukas@ecy.wa.gov) .

Sincerely,

Sarah M. Lukas  
Shoreline Planner

cc: Maria Pierce, City of Milton

25 March 2010

Chris Larson, Planner 1  
City of Milton  
1000 Laurel St.  
Milton, WA 98354

Re: City of Milton Shoreline Jurisdiction Options

Dear Chris:

The Watershed Company has developed the attached proposed maps of shoreline jurisdiction, illustrating the proposed jurisdiction option and the additional full floodplain and wetland buffers options. Under the City's current Shoreline Master Program (SMP), Surprise Lake is regulated as a shoreline. Existing shoreline jurisdiction includes the shorelands extending 200 feet from the ordinary high water mark and any associated wetlands, if identified. As part of the update to the City's Shoreline Master Program, the City also plans to include and evaluate a portion of Hylebos Creek. The City does not plan to evaluate the Urban Growth Area (UGA), as the City does not plan to annex these areas in the future. All boundaries will be reviewed for consistency with Washington Department of Ecology (Ecology) guidelines.

### **PROPOSED JURISDICTION**

The first step in updating the map of shoreline jurisdiction was to review the precise shoreline, floodway, and associated wetlands definitions found in the WAC and in Ecology rules and guidance documents. Portions of these definitions that apply to the City of Milton revolve around the flow thresholds for waterbodies meeting shoreline criteria, the two State floodway definitions, and when to consider critical areas (wetlands) as "associated" with the shoreline. The final illustration of the proposed shoreline jurisdiction is provided on the *Proposed Shoreline Jurisdiction* exhibit.

#### **Lakes**

The minimum size limit for lakes to be designated as shoreline is 20 acres. Thus, only Surprise Lake is identified as a shoreline jurisdictional lake. No other waterbodies within the City boundary exceed 20 acres.

### **Streams and Rivers**

Ecology's Digital Atlas was consulted to verify the upstream limits of stream and river shoreline jurisdiction based on USGS's recent study of the 20 cubic feet per second (cfs) cut-off. Based on this information, Hylebos Creek has a mean annual flow greater than 20 cfs beginning near the confluence with West Hylebos Creek. Downstream from this point, Hylebos Creek flows along the City's southwestern boundary.

No other waterbodies were indicated as having flows sufficient to meet shoreline criteria.

### **Shorelands**

#### **Floodplains/Floodways**

The mapping of floodplains and floodways uses the latest information developed by Pierce County and King County and is in the final stages of review by FEMA. Hylebos Creek has a narrow floodway that extends roughly parallel to its ordinary high water mark along most of the stream channel (see Steps 1 and 2 of the *Shoreline Jurisdiction Assembly* exhibit). However, the floodway does not extend beyond 200 feet landward of the OHWM. As such, the shoreline jurisdiction is not extended beyond the standard 200 feet to include any floodways (see Step 2 of the *Shoreline Jurisdiction Assembly* exhibit).

Hylebos Creek is known to have a large floodplain (see Step 3 of the *Shoreline Jurisdiction Assembly* exhibit). Within the City of Milton and downstream of the 20 cfs point, this floodplain extends in an area south and west of Porter Road and east of Interstate 5. The floodplain of Hylebos Creek does not extend west of Interstate 5 until further downstream, outside of the City limits. Therefore, shoreline jurisdiction is not extended beyond the standard 200 feet to include areas of contiguous floodplain within City limits (see Step 3).

#### **Associated Wetlands**

Existing wetland inventory information, essentially what has been identified by Pierce County and Washington Department of Fish and Wildlife's Priority Habitats and Species maps, was reviewed to identify associated wetlands (see Steps 4 and 5 of the *Shoreline Jurisdiction Assembly* exhibit). Ecology guidance states that the entire wetland is associated if any part of it lies within the area 200 feet from the OHWM (or floodway in riverine environments) of a state shoreline. Further guidance states that wetlands that are hydraulically connected to a Shoreline also would be considered associated, as well as wetlands within the 100-year floodplain. Wetlands that are separated by an obvious topographic break from the shoreline are not associated, provided they are outside the shoreland zone and provided that the break is not an artificial feature such as a berm or road.

Associated wetlands are identified in several areas along the jurisdictional boundary of Hylebos Creek (see Step 5 of *the Shoreline Jurisdiction Assembly* exhibit).

#### **OTHER JURISDICTION OPTIONS**

The information above describes assembly of the minimum shoreline jurisdiction. The City may further elect to expand jurisdiction to include 1) all or part of the 100-year floodplain, or 2) buffers of associated wetlands that would otherwise encompass areas outside of shoreline jurisdiction.

The 100-year floodplain option was assembled by combining the *Proposed Shoreline Jurisdiction* exhibit with additional floodplain areas shown on Step 3 of the *Shoreline Jurisdiction Assembly* exhibit. The resulting optional jurisdiction is illustrated on the *Shoreline Jurisdiction Option 1* exhibit.

The wetland buffers option was assembled by combining the *Proposed Shoreline Jurisdiction* exhibit with buffers assigned to associated wetlands illustrated on Step 5 of the *Shoreline Jurisdiction Assembly* exhibit. Known wetlands within the City have not been individually rated using Ecology's latest wetland rating system as required by the City's critical areas regulations. According to the critical area regulations, possible buffers range from 40 to 300 feet. For illustration purposes only, these wetlands were assigned a 100-foot buffer (see *Shoreline Jurisdiction Option 2* exhibit). Given the existing residential development in the area adjacent to the lone associated wetland located outside of the standard 200-foot shoreline jurisdiction and the anticipated inclusion of the City's existing critical areas regulations (i.e. wetland buffers) into the SMP, it does not appear that inclusion of the buffers (*Option 2*) in shoreline jurisdiction would provide meaningful additional protection to the wetland and may unnecessarily increase the permit burden on the property owner.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan Nickel", with a long horizontal stroke extending to the right.

Dan Nickel  
Environmental Engineer

Enclosures

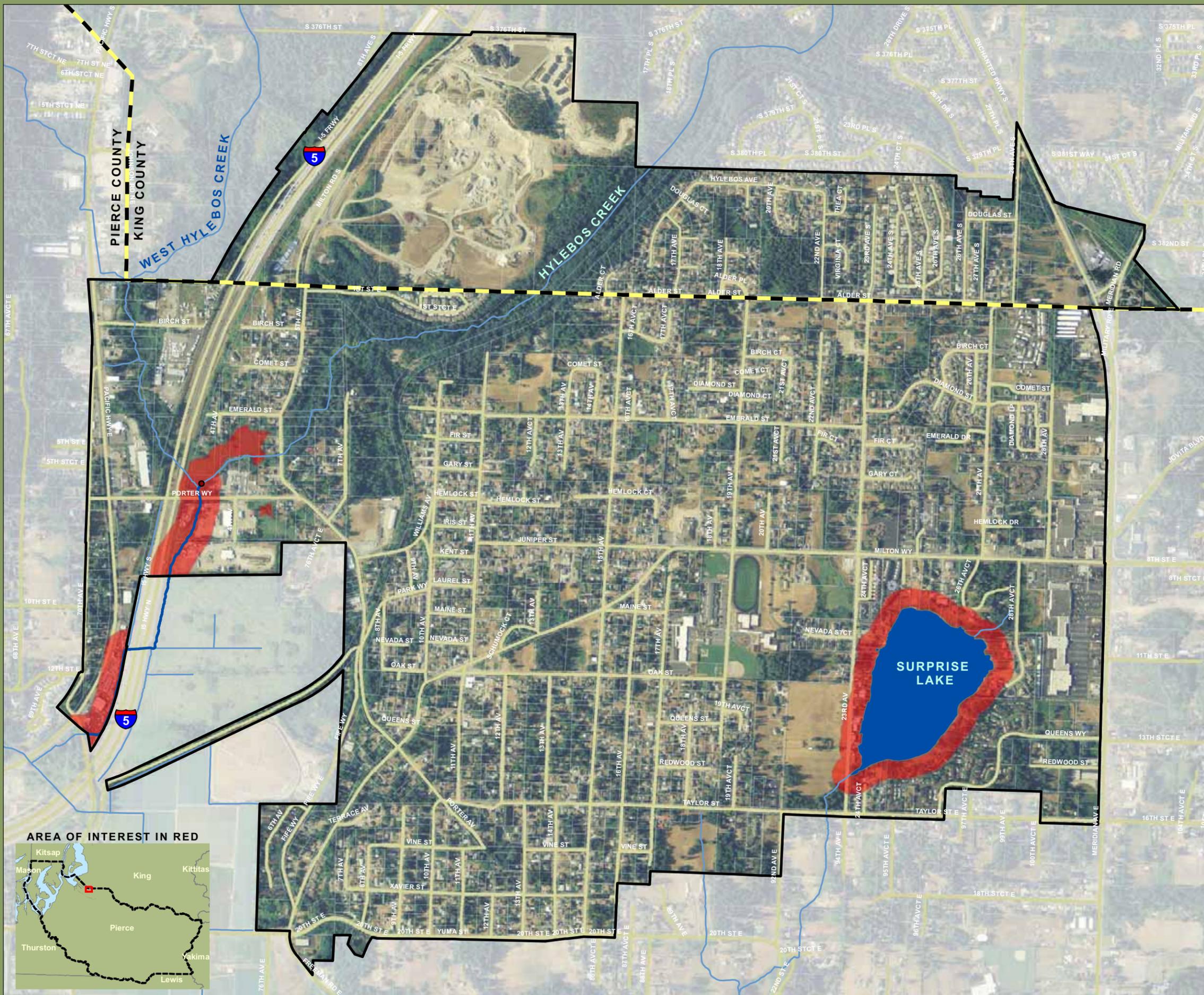
cc: MAKERS Architecture and Urban Design





CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 1.  
PROPOSED SHORELINE  
JURISDICTION**



0 500 1,000  
Feet

MAP LEGEND

- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- Other Streams
- Roads
- City Boundary

AREA OF INTEREST IN RED



Data: Pierce County,  
City of Milton, TWC.  
December 13, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



**APPENDIX D**

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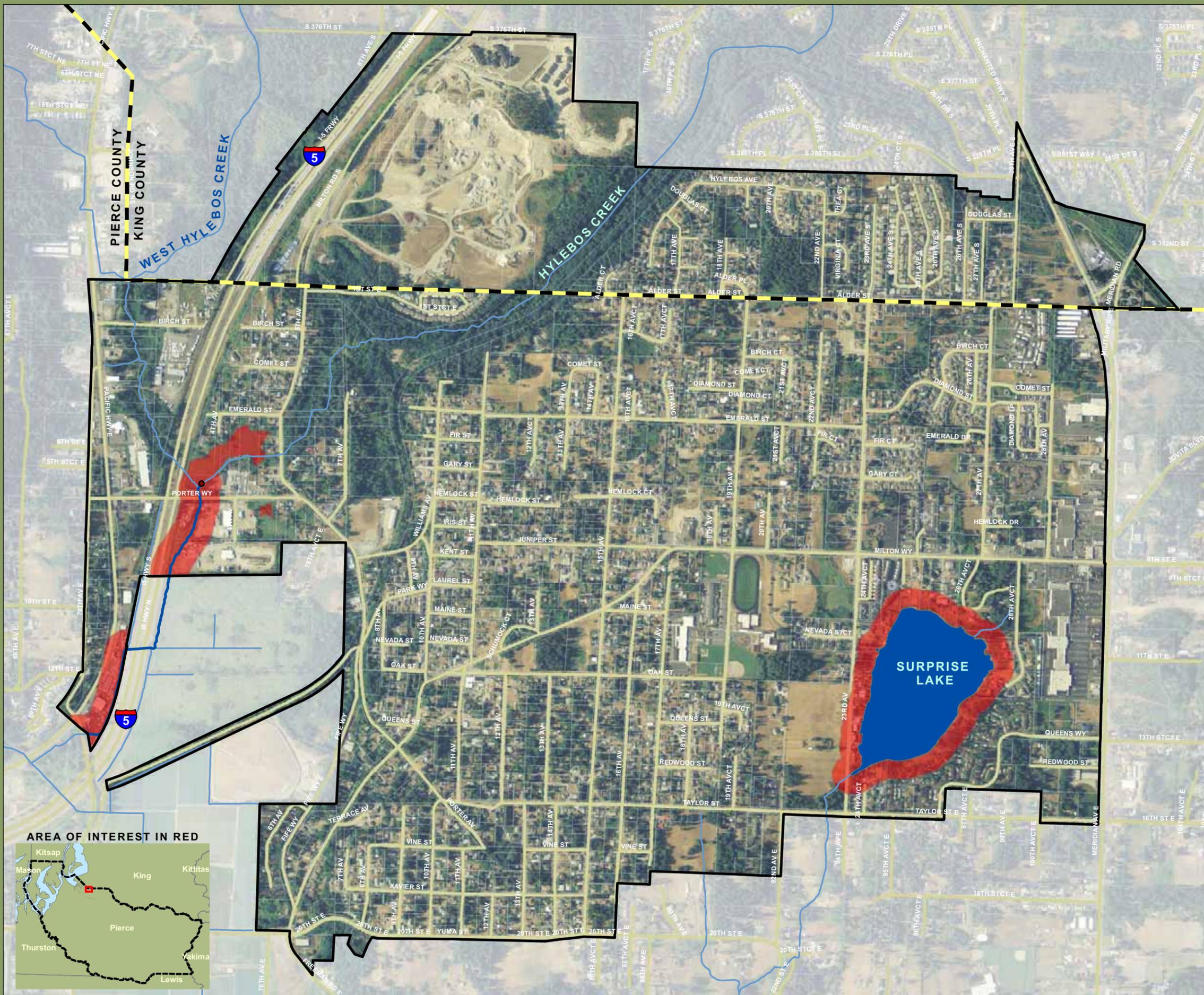
**Inventory and Analysis Map Folio**





CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 1.  
PROPOSED SHORELINE  
JURISDICTION**



0 500 1,000  
Feet

MAP LEGEND

- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- Other Streams
- Roads
- City Boundary



Data: Pierce County,  
City of Milton, TWC.  
December 13, 2010

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CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 2.  
CITY ZONING MAP**



0 500 1,000  
Feet

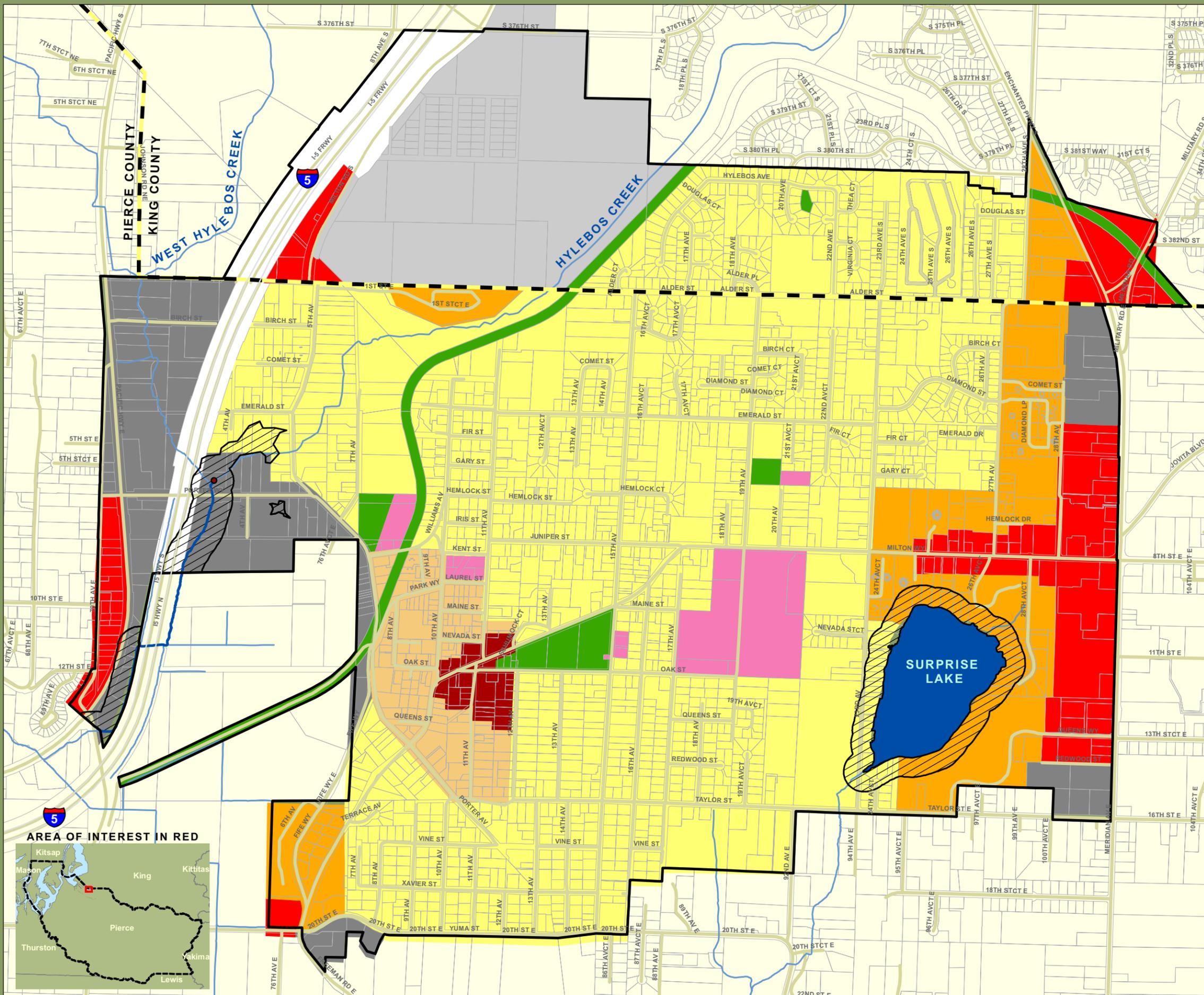
MAP LEGEND

- City Boundary
- SMP Streams
- Shoreline Jurisdiction
- SMP Waterbodies
- Roads
- ZONING**
- Business District (B)
- Community Facilities District (CF)
- Light Manufacturing District (M-1)
- Mixed-Use Town Center District (MX)
- Open Space District (OS)
- Planned Development District (PD)
- Residential Moderate-Density District (RMD)
- Residential Multi-Family District (RM)
- Residential Single Family District (RS)



Data: Pierce County,  
City of Milton, TWC.  
December 13, 2010

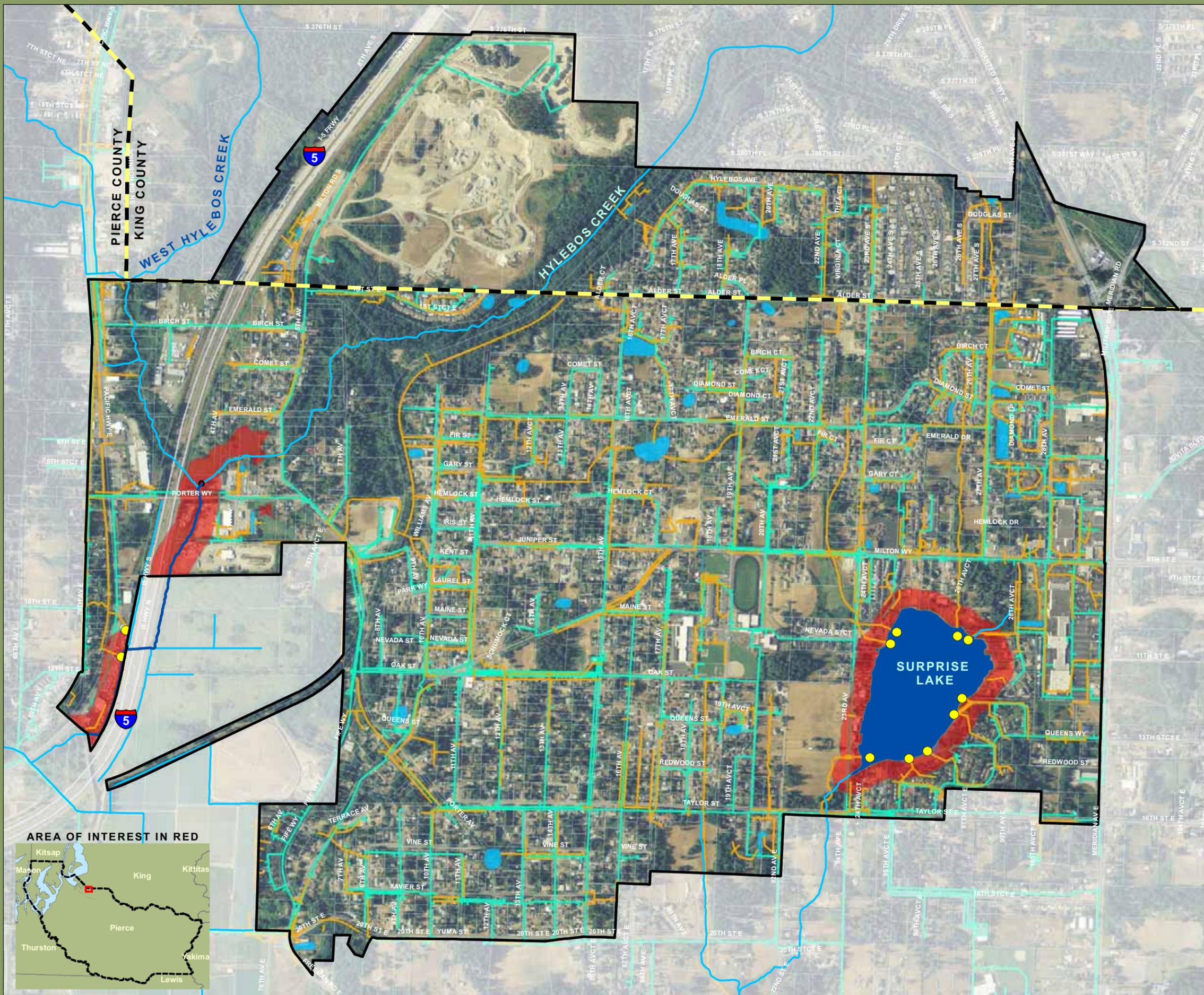
All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.





CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 3.  
SURFACE WATER  
SYSTEM**



0 500 1,000  
Feet

MAP LEGEND

- Shoreline Jurisdiction
- SMP Waterbodies
- Ponds
- SMP Streams
- County Streams
- Storm Drain System
- Storm Drain Outfall
- Water Mains
- City Boundary

AREA OF INTEREST IN RED



Data: Pierce County,  
City of Milton, TWC.  
December 13, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 4.  
IMPERVIOUS SURFACES**

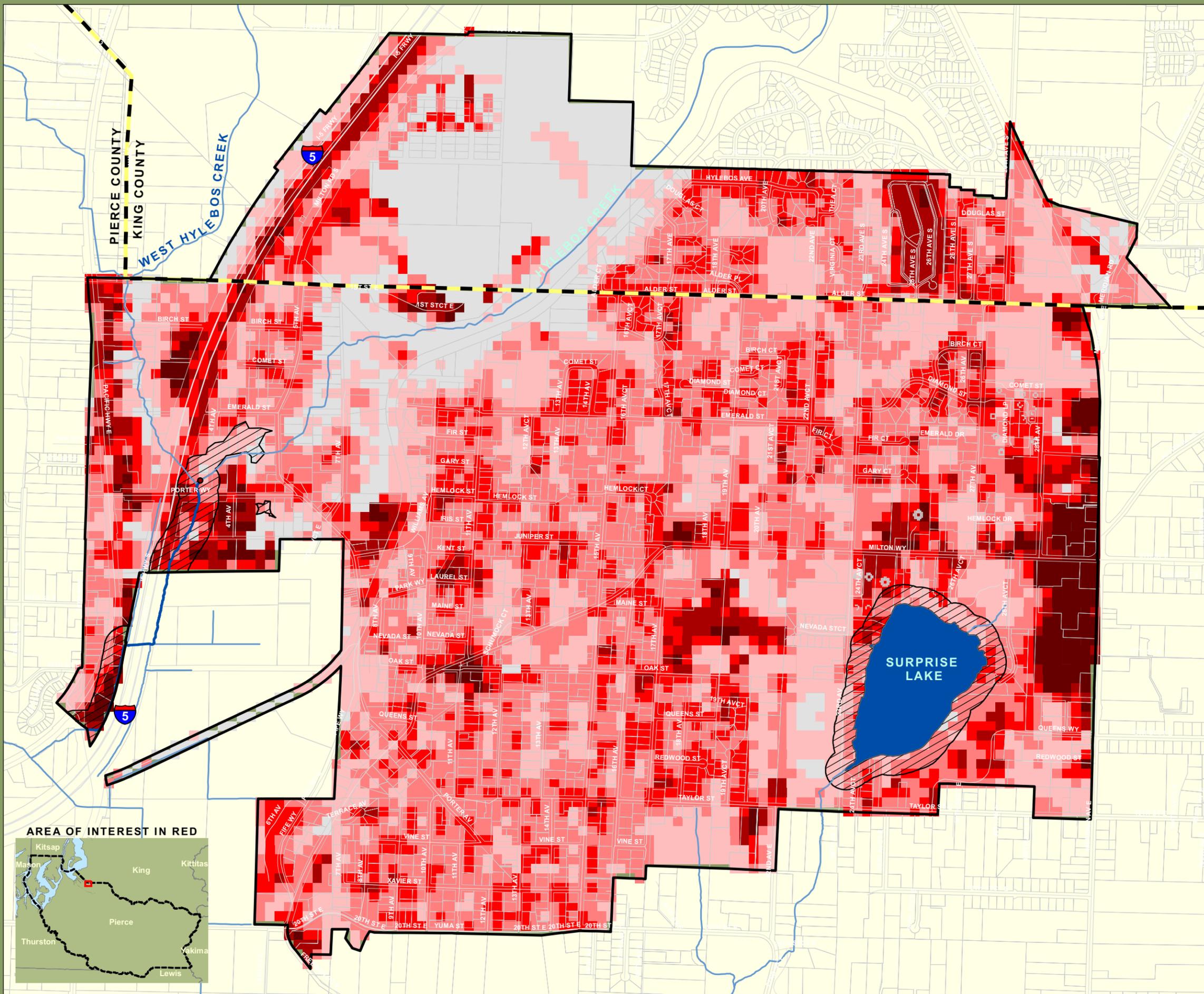


0 500 1,000  
Feet

MAP LEGEND  
PERCENT IMPERVIOUS\*

- 0
- 1 - 20
- 21 - 45
- 46 - 65
- 66 - 85
- 86 - 100
- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- Other Streams
- Roads
- City Boundary

\*Percent impervious data comes from the USGS NLCD dataset, and was derived from 2001 satellite imagery.



Data: USGS,  
City of Milton, TWC,  
December 13, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.

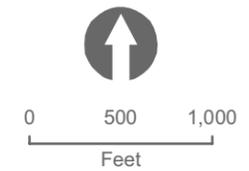


CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 5.  
VEGETATION**

MAP LEGEND

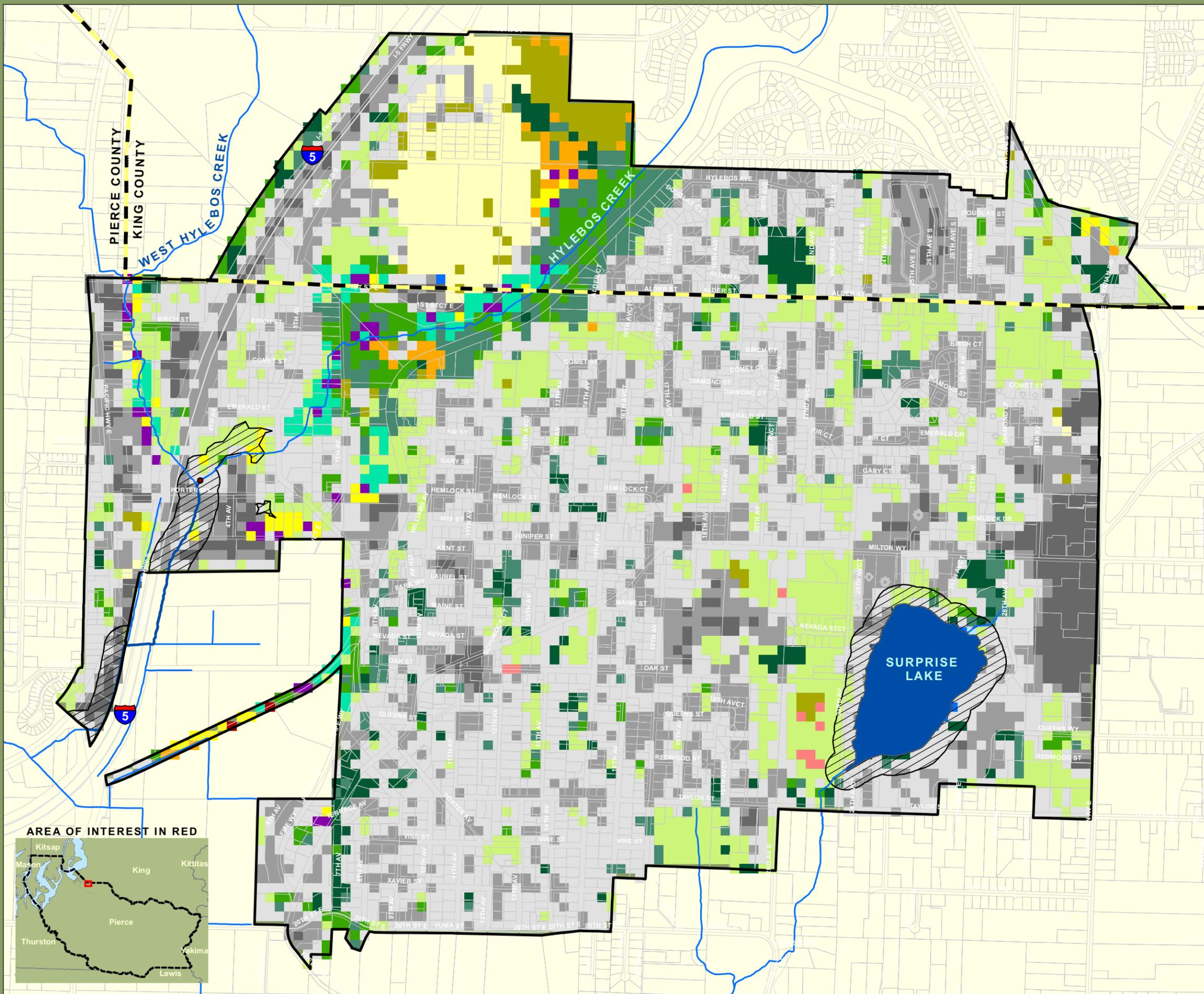
- Bare Land
- Cultivated
- Deciduous Forest
- Developed Open Space
- Evergreen Forest
- Grassland
- High Intensity Developed
- Low Intensity Developed
- Medium Intensity Developed
- Mixed Forest
- Palustrine Emergent Wetland
- Palustrine Forested Wetland
- Palustrine Scrub/Shrub Wetland
- Pasture/Hay
- Scrub/Shrub
- Unconsolidated Shore
- Water
- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- Other Streams
- Roads
- City Boundary



Data: NOAA CCAP,  
City of Milton, TWC.  
December 13, 2010



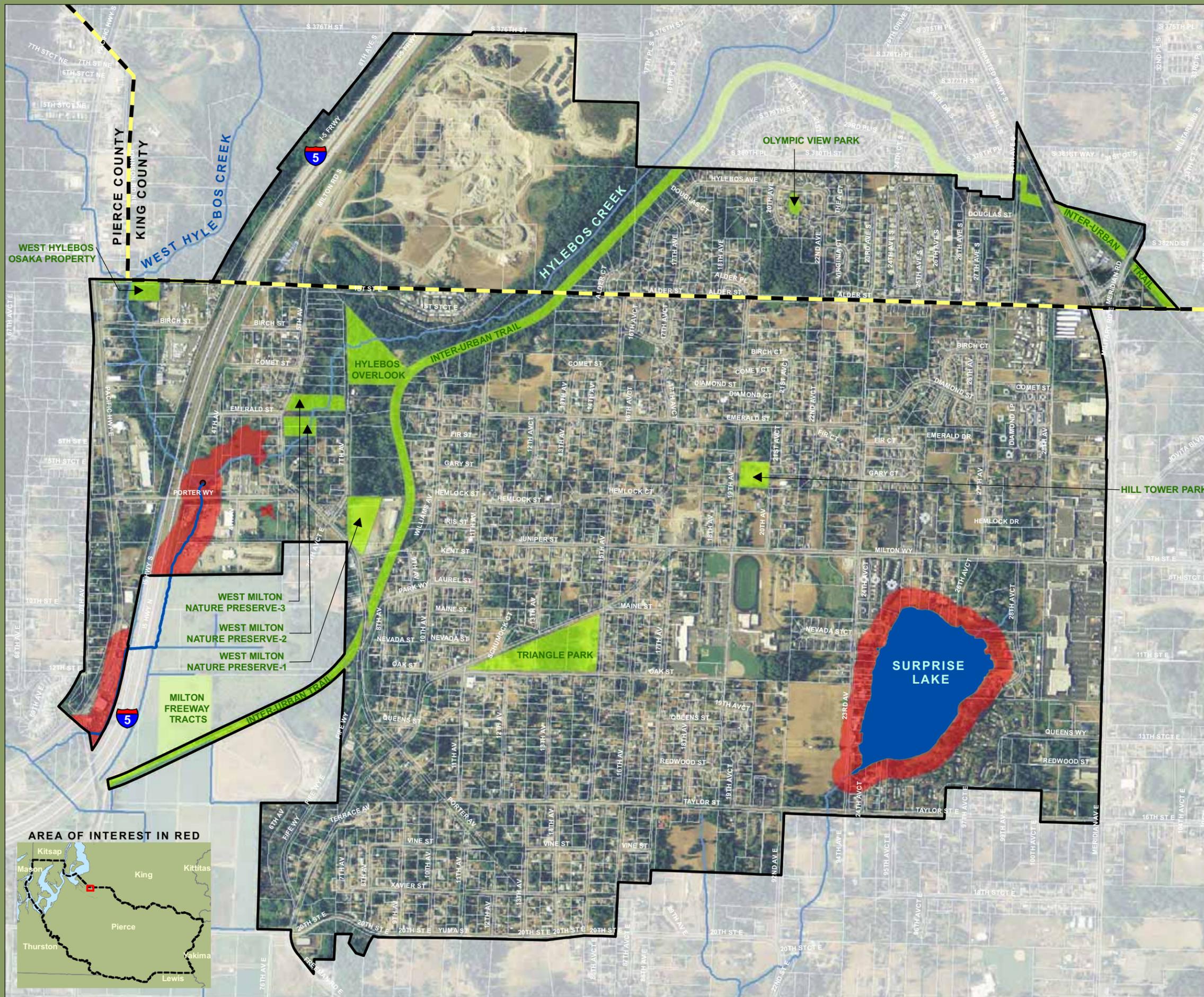
All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.





CITY OF MILTON  
SHORELINE MASTER PROGRAM

FIGURE 6.  
PUBLIC PLACES



0 500 1,000  
Feet

MAP LEGEND

- Shoreline Jurisdiction
- Parks/Public Places
- SMP Waterbodies
- SMP Streams
- Other Streams
- City Boundary

AREA OF INTEREST IN RED



Data: Pierce County,  
City of Milton, TWC.  
December 13, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



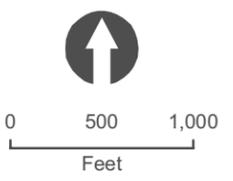
CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 7.  
NATURAL RESOURCES  
CONSERVATION SERVICE  
SSURGO SOILS**

MAP LEGEND

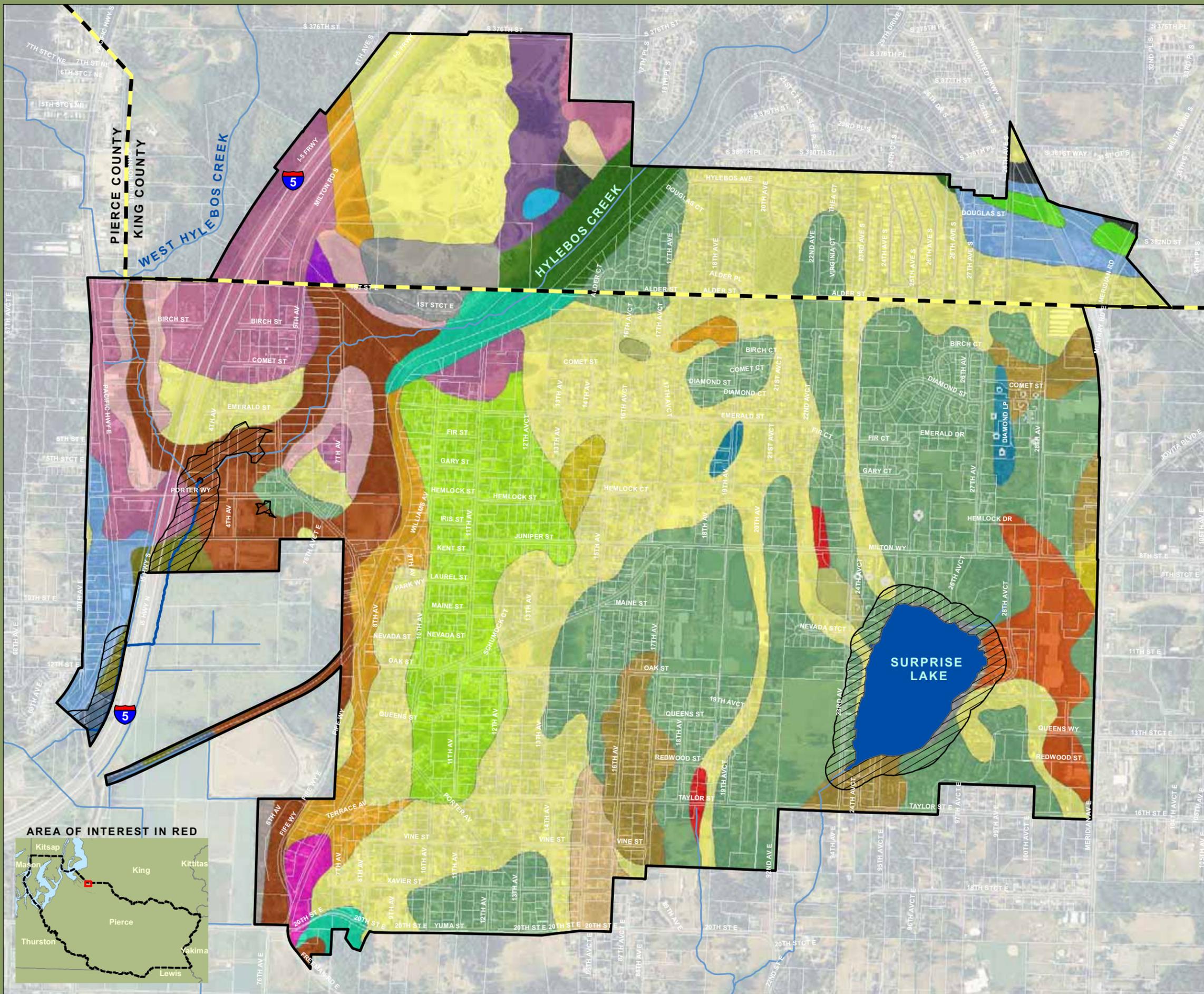
NRCS SSURGO Soils

- Alderwood gravelly sandy loam, 0 to 6 percent slopes
- Alderwood gravelly sandy loam, 6 to 15 percent slopes
- Alderwood gravelly sandy loam, 15 to 30 percent slopes
- Bellingham silty clay loam - Hydric
- Dupont muck - Hydric
- Gravel Pit
- Indianola loamy sand, 0 to 6 percent slopes
- Indianola loamy sand, 15 to 45 percent slopes
- Indianola loamy sand, 6 to 15 percent slopes
- Kapowsin gravelly loam, 0 to 6 percent slopes
- Kapowsin gravelly loam, 6 to 15 percent slopes
- Kitsap silt loam, 2 to 8 percent slopes
- Kitsap silt loam, 8 to 15 percent slopes
- Kitsap silt loam, 15 to 30 percent slopes
- Norma fine sandy loam
- Puyallup fine sandy loam
- Ragnar sandy loam, 0 to 6 percent slopes
- Semiahmoo muck - Hydric
- Shalcar muck - Hydric
- Sultan silt loam
- Tisch silt
- Xerochrepts, 45 to 70 percent slopes
- Bellingham Silt Loam
- Everett Gravelly Sandy Loam, 0-5% Slopes
- Everett Gravelly Sandy Loam, 5-15% Slopes
- Indianola Loamy Fine Sand, 4-15% Slopes
- Seattle Muck - Hydric
- Tukwila Muck - Hydric
- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- City Boundary



Data: NRCS,  
City of Milton, TWC.  
December 13, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



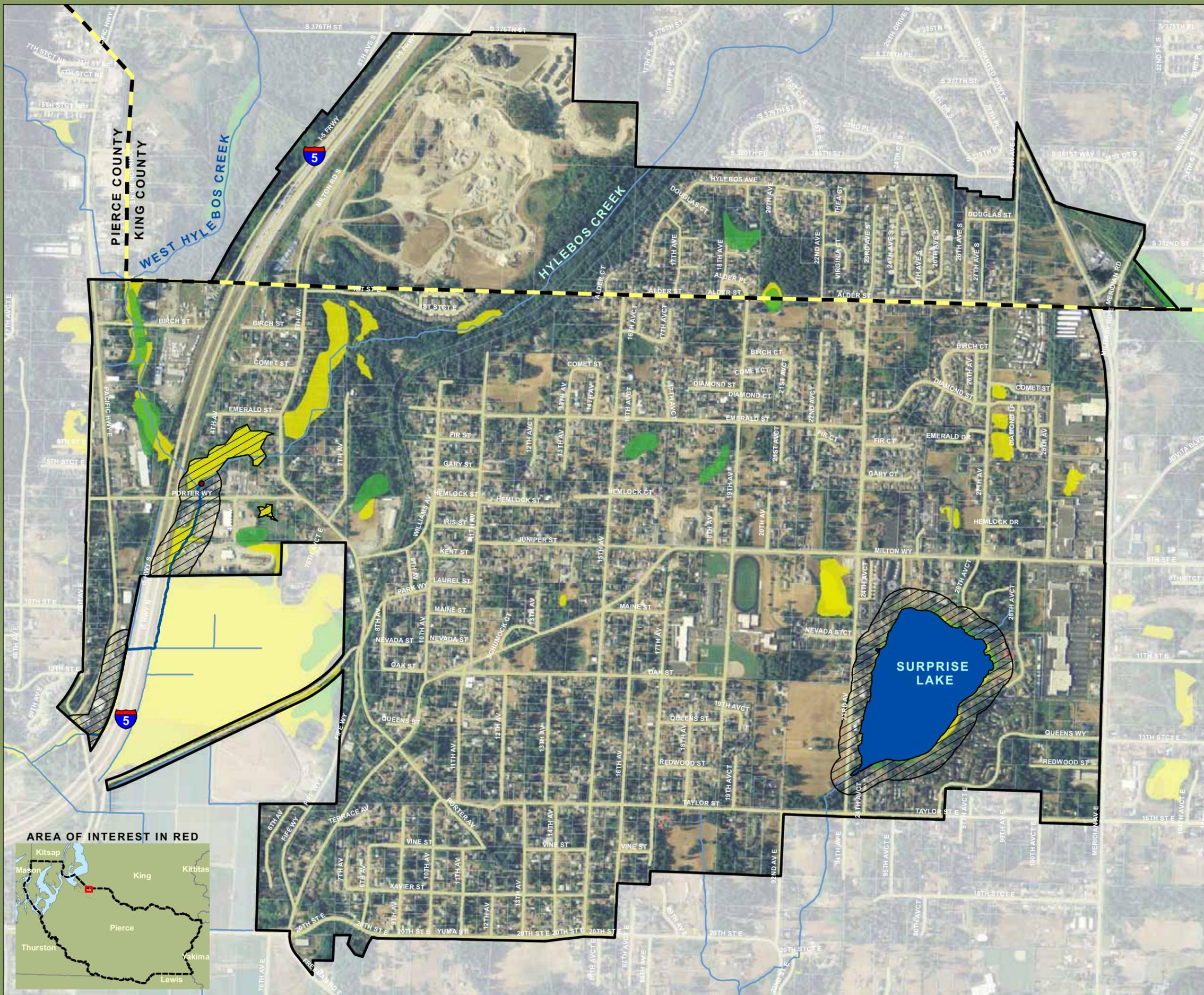
AREA OF INTEREST IN RED





CITY OF MILTON  
SHORELINE MASTER PROGRAM

**FIGURE 8.  
WETLANDS**



0 500 1,000  
Feet

MAP LEGEND

-  Shoreline Jurisdiction
-  SMP Waterbodies
-  NWI Wetlands
-  CWI Wetlands
-  SMP Streams
-  Other Streams
-  City Boundary



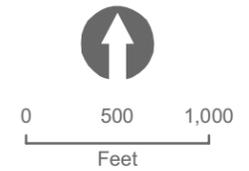
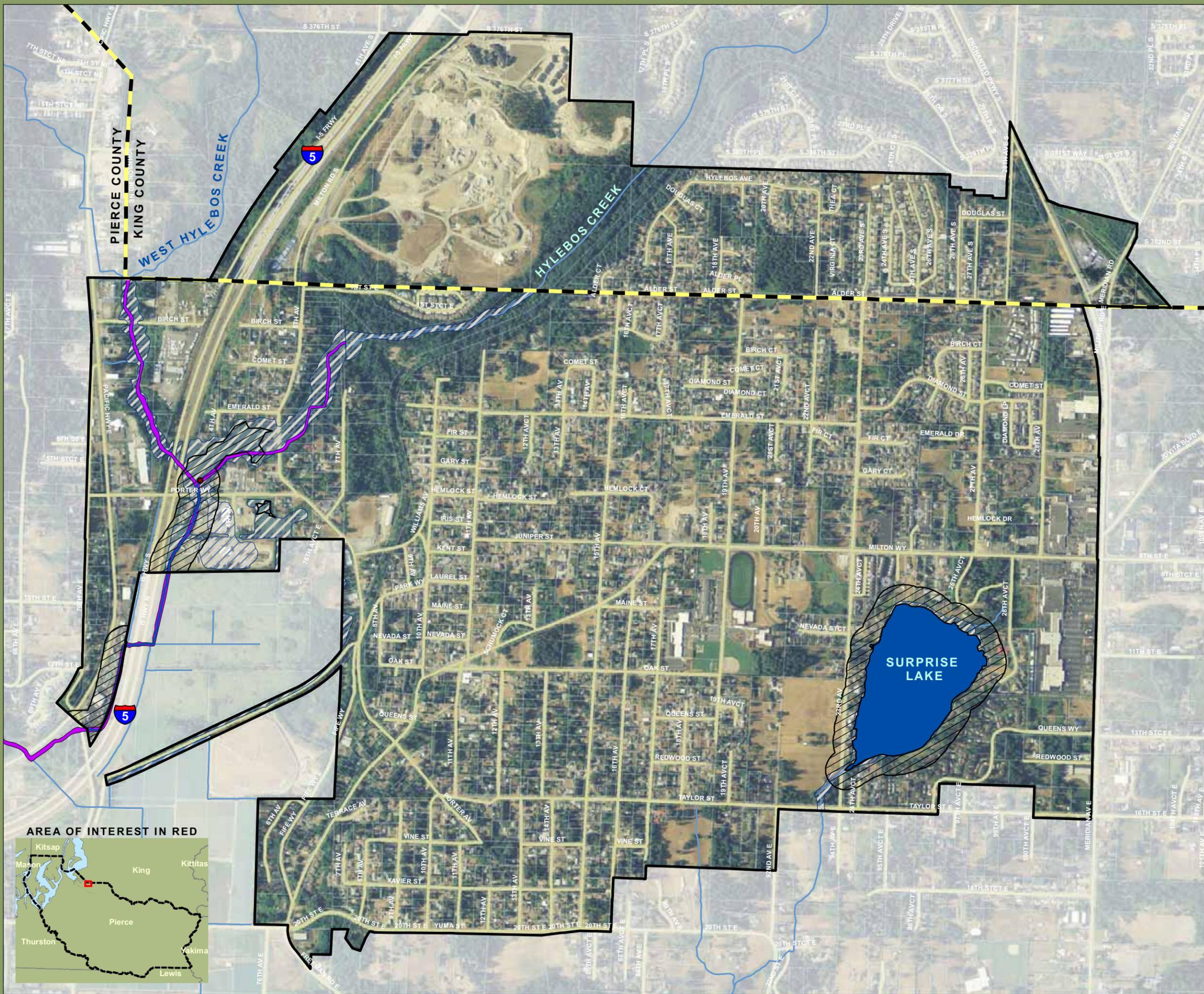
Data: FWS NWI, Pierce County,  
City of Milton, TWC.  
December 13, 2010

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CITY OF MILTON  
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**FIGURE 9.  
FLOODPLAIN & FLOODWAY**



- MAP LEGEND**
- Shoreline Jurisdiction
  - County Floodplain
  - County Floodway
  - SMP Waterbodies
  - SMP Streams
  - Other Streams
  - City Boundary



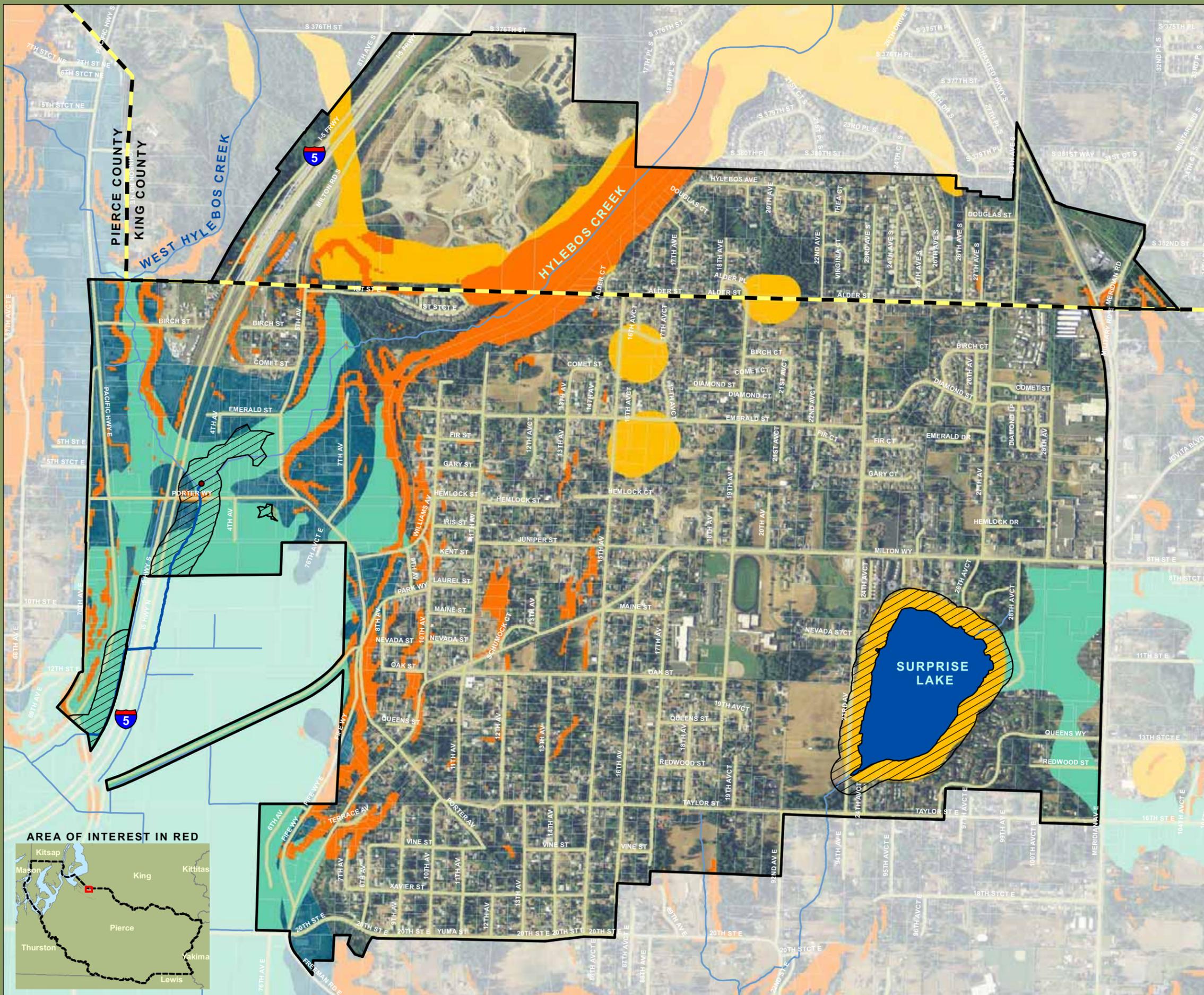
Data: Pierce County,  
City of Milton, TWC.  
December 13, 2010

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**FIGURE 10.  
GEOLOGIC HARZARDS**



0 500 1,000  
Feet

MAP LEGEND

-  Shoreline Jurisdiction
-  Erosion Hazard
-  Landslide Hazard
-  Volcanic Hazard
-  Seismic Hazard
-  SMP Waterbodies
-  SMP Streams
-  Other Streams
-  City Boundary



Data: Pierce County,  
King County, TWC.  
December 13, 2010

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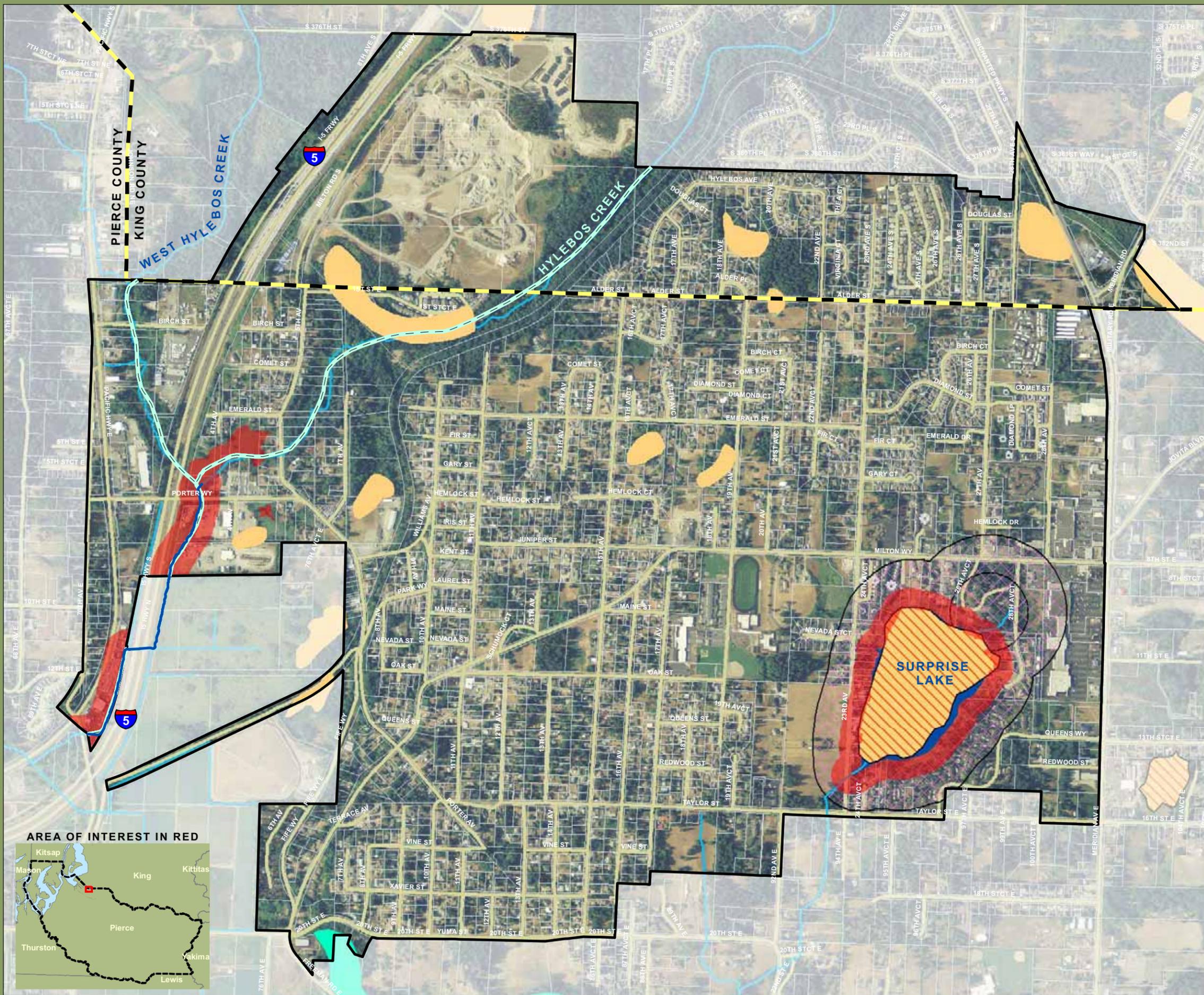
**FIGURE 11.  
WDFW PRIORITY  
SPECIES & HABITATS**



0 500 1,000  
Feet

MAP LEGEND

- Fish Distribution, species include:
  - Coho Salmon
  - Fall Chinook
  - Fall Chum
  - Pink Salmon
  - Winter Steelhead
- Bald Eagle Buffer
- Waterfowl Concentrations
- Urban Natural Open Space
- Priority Wetlands
- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- Other Streams
- City Boundary



AREA OF INTEREST IN RED



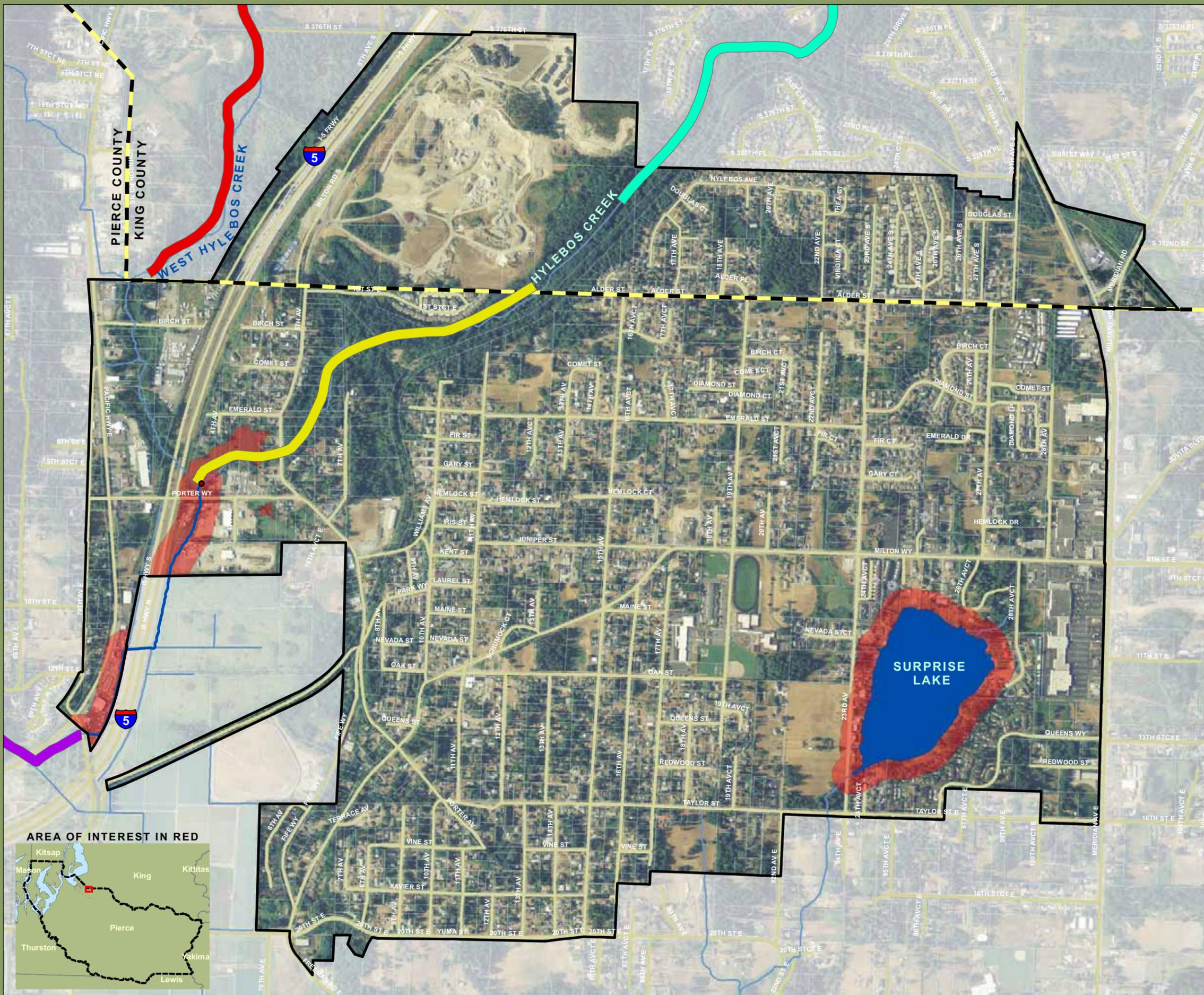
Data: WDFW,  
City of Milton, TWC.  
December 23, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



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**FIGURE 12.**  
**303d/305b IMPAIRED**  
**WATERBODIES**



0 500 1,000  
Feet

MAP LEGEND

- CAT 5 - Bioassessment; CAT 2 - Dissolved Oxygen
- CAT 5 - Fecal coliform
- CAT 5 - Fecal coliform
- CAT 5 - Copper; CAT 2 - Dissolved oxygen; CAT 2 - Fecal coliform
- Shoreline Jurisdiction
- SMP Waterbodies
- SMP Streams
- Other Streams
- City Boundary



Data: DOE,  
City of Milton, TWC.  
December 13, 2010

All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



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SHORELINE MASTER PROGRAM

**FIGURE 13.  
SHORELINE MODIFICATIONS**



0 130 260  
Feet

MAP LEGEND

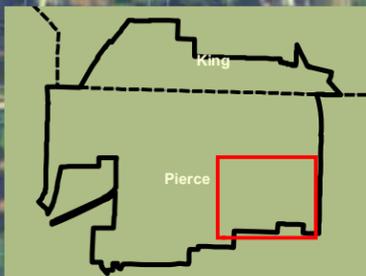
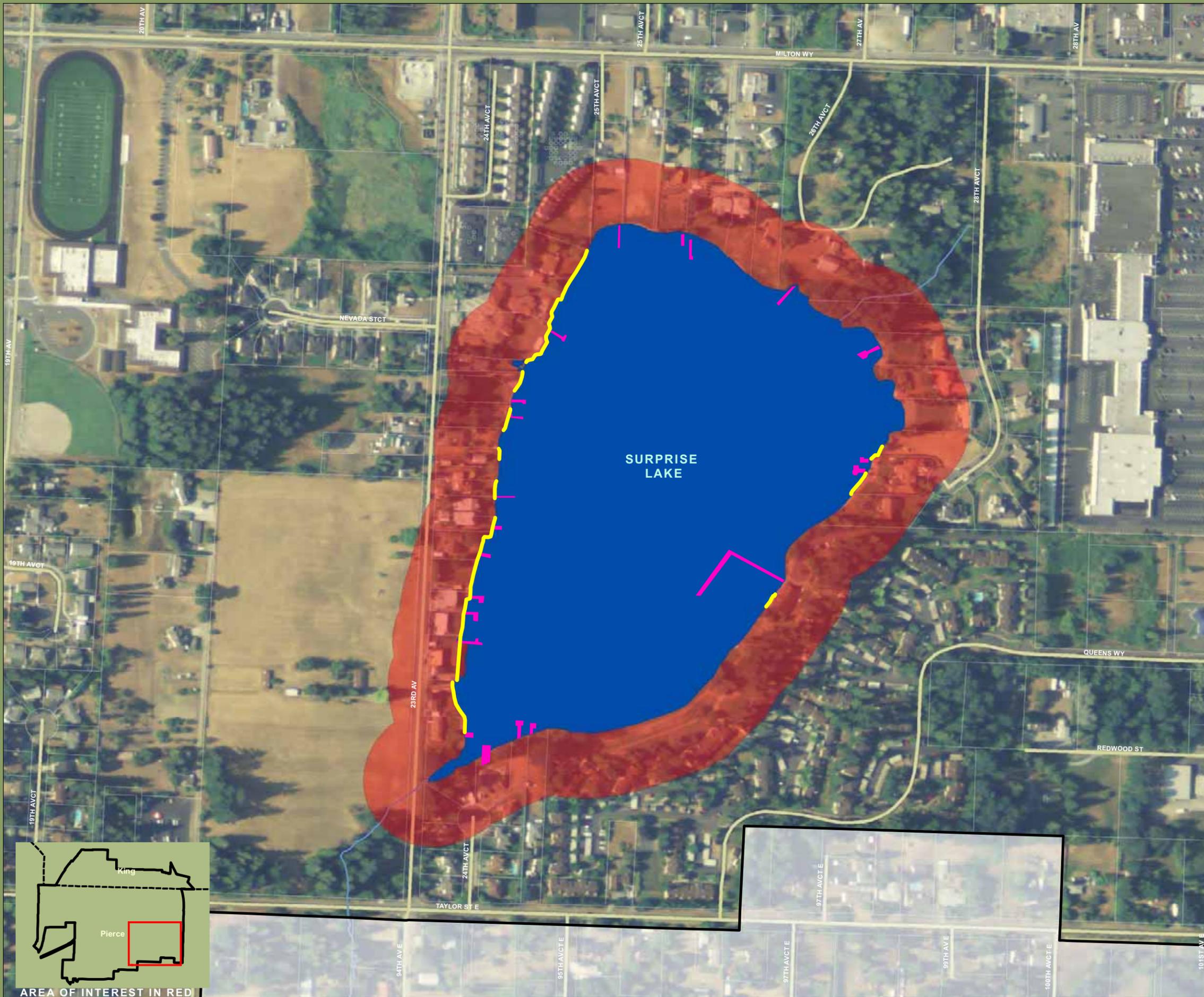
-  Overwater Structures\*
-  Shoreline Armoring\*
-  Shoreline Jurisdiction
-  SMP Waterbodies
-  SMP Streams
-  Other Streams
-  City Boundary

*\* Features are estimated from County-wide aerial only. Data might not reflect current conditions and is intended for planning purposes only.*



Data: City of Milton, TWC.  
December 13, 2010

*All features depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.*



AREA OF INTEREST IN RED