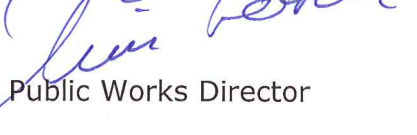




**PUBLIC WORKS DEPARTMENT**  
Timothy J. LaPorte, P.E., Public Works  
Director

Phone: 253-856-5500  
Fax: 253-856-6500

Address: 220 Fourth Avenue S.  
Kent, WA 98032-5895

Date: October 16, 2013   
From: Tim LaPorte, P.E., Public Works Director  
To: 2002 City of Kent Surface Water Design Manual Users  
Copy: Ben Wolters, Economic & Community Development Director  
Fred Satterstrom, Planning Services Director  
Kurt Hansen, Economic Development Manager  
Brennan Taylor, P.E., Development Engineering Manager  
Jeff Watling, Parks Director  
Chad Bieren, P.E., City Engineer  
Mike Mactutis, P.E., CFM, Environmental Engineering Manager  
Mark Howlett, P.E., CFM, Design Engineering Manager

RE: **Blanket Adjustment 2013-1: Kent Surface Water Design Manual 2002**  
1. National Pollutant Discharge Elimination System Permit (NPDES) Requirements  
2. Updated Kent Surface Water Design Manual (KSWDM) Maps

**1. National Pollutant Discharge Elimination System Permit Requirements**

The following changes to the Kent Surface Water Design Manual (KSWDM) reflect the necessary modifications to remain consistent with the National Pollutant Discharge Elimination System Phase II Municipal Stormwater permit as mandated by the federal Clean Water Act and as administered by the state Department of Ecology.

**A. Central Business District Water Quality Treatment Requirements:**

Under *Section 1.2.8.1 Core Requirement #8: Water Quality Menus* of the KSWDM, water quality treatment standards are described. For new development and redevelopment projects that are located within the *Mill Creek – 76th Ave Outfall* drainage basin (commonly known as the Central Business District Area of the city, reference the attached Water Quality Applications Map), the following condition applies:

For projects (new and redevelopment projects) within the *Mill Creek – 76th Ave Outfall* drainage basin causing **one-acre or greater** of disturbance AND with new and/or replaced pollution generating impervious surfaces greater than

5,000 SF (where the existing surfaces are removed to bare earth or to its crushed rock base layer), which includes parking lots, driveways, and roads, these surfaces are required to have treatment of its pollution generating stormwater runoff to a Resource Stream Protection Treatment level or equivalent as approved by the city.

For projects causing **less than one-acre** of disturbance within the *Mill Creek – 76th Ave Outfall* drainage basin along with the same thresholds above for pollution generating impervious surfaces, the existing requirements for water quality treatment shall apply.

**B. Water Quality Treatment Requirements for Redevelopment Projects Causing Greater than One Acre of Disturbance:**

Under *Section 1.2.8.1 Core Requirement #8: Water Quality Menus* of the KSWDM, water quality treatment standards are described. For projects defined as a “*redevelopment*” projects, the first sentence in the second paragraph of Section 1.2.8.1 page 5.1-50, shall be revised as follows:

**“Redevelopment projects** subject to Core Requirement #8 need only apply the Basic WQ Menu for projects that cause less than one-acre of disturbance. For redevelopment projects that cause one-acre or greater of disturbance AND are subject to Core Requirement #8, the Resource Stream Protection Menu shall apply.”

For redevelopment projects causing **less than one-acre** of disturbance, the existing requirements for water quality treatment remain.

**C. Consideration of Other Required Permits – National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit:**

For the NPDES Construction Stormwater General Permit, the Washington State Department of Ecology has changed the project area thresholds for disturbance from five-acres to one-acre. As such, *Section 1.2.5.3 page 5.1-45 under Consideration of Other Required Permits* of the KSWDM shall be revised as follows:

Coverage under the **NPDES Construction Stormwater General Permit** from the state Department of Ecology is required for projects that will disturb more than ~~five~~ one acre. The ~~five-acre~~ one-acre threshold applies even where the ~~five acres~~ are one-acre is to be disturbed in phases, as long as the construction is “part of a larger common plan of development or sale”.

Again, all of the above changes to the KSWDM are required under the city’s NPDES Municipal Stormwater Permit as mandated by the federal Clean Water Act. Please notify users of the KSWDM of these revisions.

## 2. Updated Kent Surface Water Design Manual Maps:

All reference maps included in the KSWDM have been updated to reflect the revised city limits and changes included in this Blanket Adjustment. These maps include the following:

- 1. Flow Control Applications Map
- 2. Water Quality Applications Map
- 3. Landslide Hazard/Landslide Hazard Drainage Areas Map
- 4. Erosion Hazard Areas Map
- 5. Wetlands Map
- 6. Soils/Wellhead Areas Map

A few items of note on the revised KSWDM Maps include:

- Water Quality Applications Map – Consistent with the NPDES requirement described above, the water quality applications map has been revised to require treatment of pollution generating surfaces for projects (new and redevelopment projects) causing one acre or greater of disturbance.
- Landslide Hazard/Landslide Hazard Drainage Area Map – This map does not include all Landslide Hazard *Drainage* Areas in the city (peach colored areas on the map) more notably in the Panther Lake Area (annexed by the city in 2011). As described on the map legend, determination of Landslide Hazard *Drainage* Areas shall be made in a separate analysis.

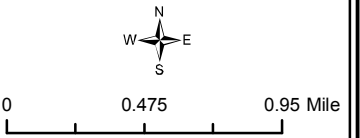
Please notify users of the KSWDM of the described map changes. All of the revised maps are included as an attachment to this memo.



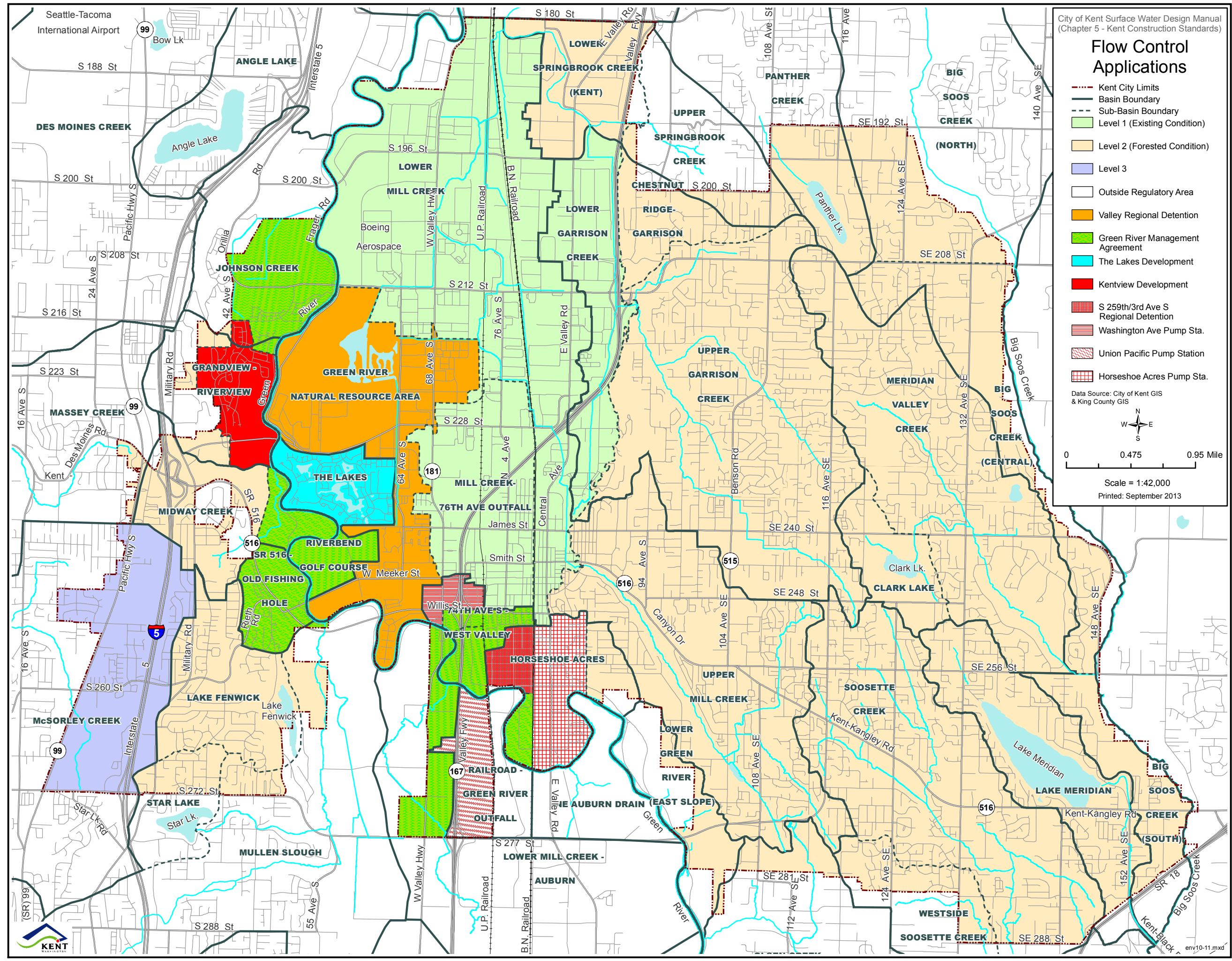
### Flow Control Applications

- Kent City Limits
- Basin Boundary
- Sub-Basin Boundary
- Level 1 (Existing Condition)
- Level 2 (Forested Condition)
- Level 3
- Outside Regulatory Area
- Valley Regional Detention
- Green River Management Agreement
- The Lakes Development
- Kentview Development
- S 259th/3rd Ave S Regional Detention
- Washington Ave Pump Sta.
- Union Pacific Pump Station
- Horseshoe Acres Pump Sta.

Data Source: City of Kent GIS & King County GIS



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# Water Quality Applications

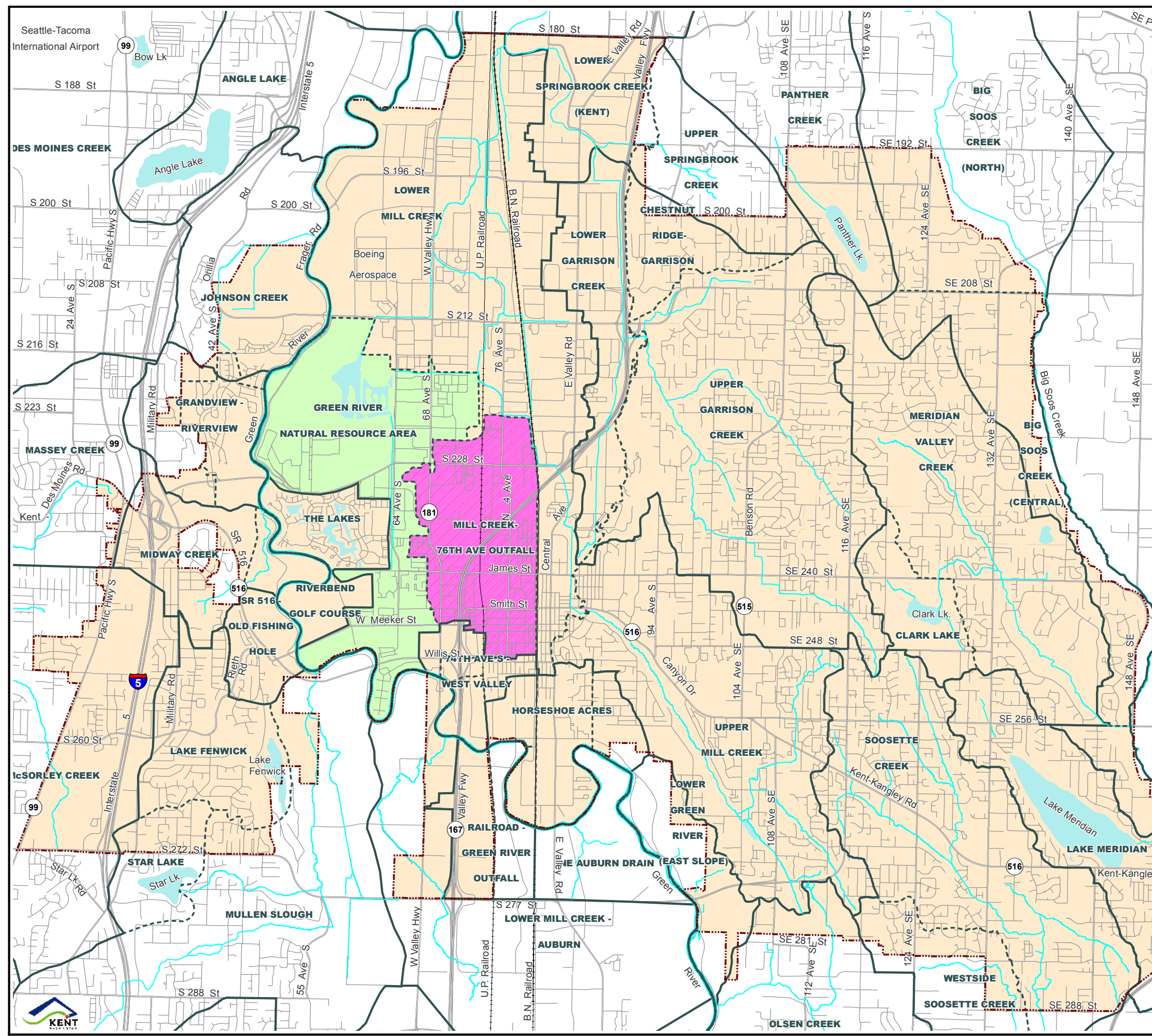
- Kent City Limits
- Sub-Basin Boundary
- Basin Boundary
- Resource Stream Protection Treatment Required **Note 1**
- Mill Creek - 76th Ave Outfall (Central Business District) - No water quality treatment required & **Notes 1 & 2**
- Green River Natural Resource Area - No water quality treatment required **Note 2**
- Outside Regulatory Area

Data Source: City of Kent GIS & King County GIS

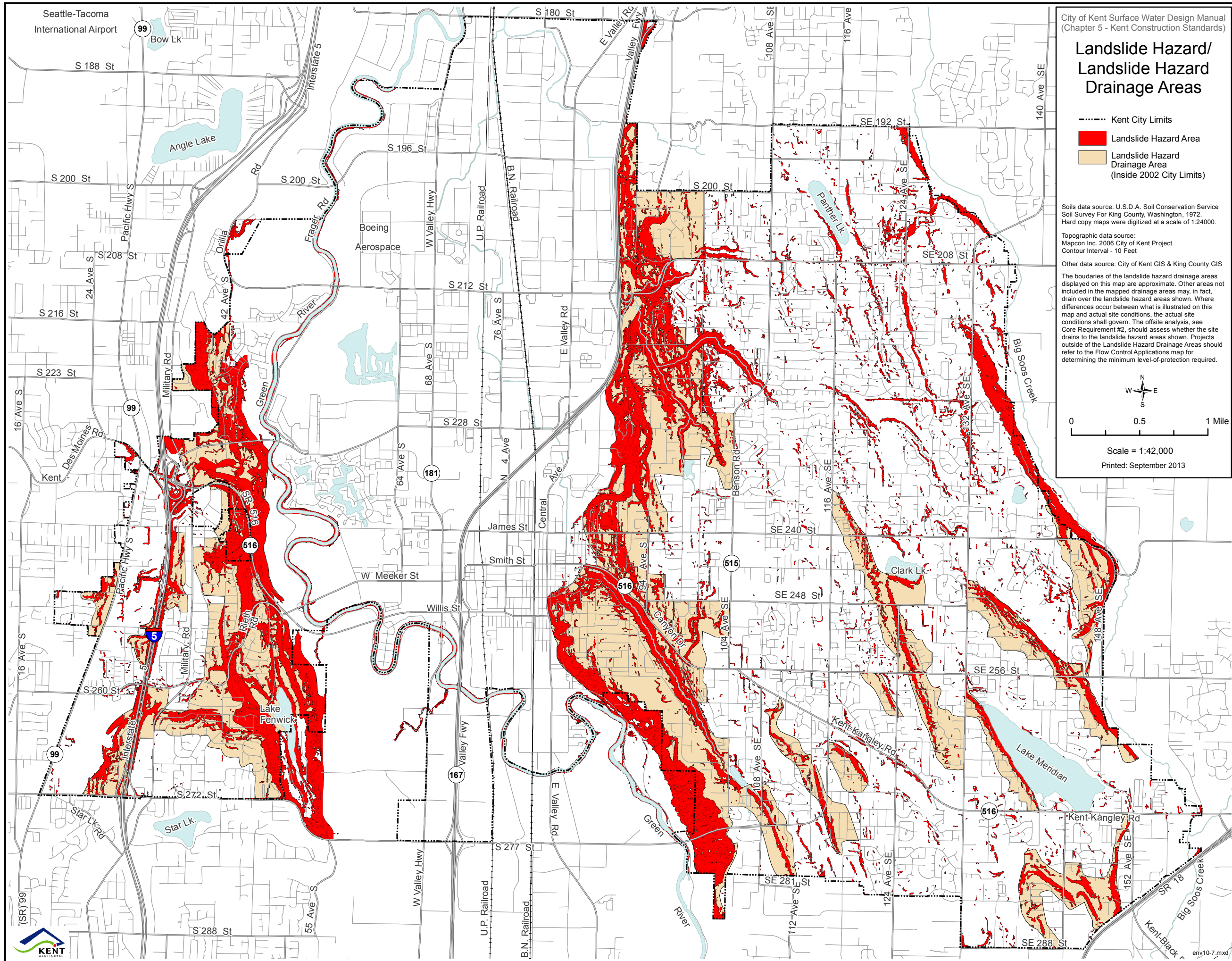
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**Note 1:**  
As required by the NPDES permit, all projects (new and redevelopment projects) causing one-acre or greater of disturbance and subject to Core Requirement #8: Water Quality, shall meet the Resource Stream Protection Menu for treatment. Refer to Section 1.2.8 for projects under one-acre.

**Note 2:**  
Refer to Section 1.3.5, - Special Requirement #5: Oil Control, as applicable.







### Landslide Hazard/ Landslide Hazard Drainage Areas

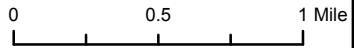
- Kent City Limits
- Landslide Hazard Area
- Landslide Hazard Drainage Area (Inside 2002 City Limits)

Soils data source: U.S.D.A. Soil Conservation Service  
Soil Survey For King County, Washington, 1972.  
Hard copy maps were digitized at a scale of 1:24000.

Topographic data source:  
Mapcon Inc. 2006 City of Kent Project  
Contour Interval - 10 Feet

Other data source: City of Kent GIS & King County GIS

The boundaries of the landslide hazard drainage areas displayed on this map are approximate. Other areas not included in the mapped drainage areas may, in fact, drain over the landslide hazard areas shown. Where differences occur between what is illustrated on this map and actual site conditions, the actual site conditions shall govern. The offsite analysis, see Core Requirement #2, should assess whether the site drains to the landslide hazard areas shown. Projects outside of the Landslide Hazard Drainage Areas should refer to the Flow Control Applications map for determining the minimum level-of-protection required.



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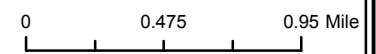
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# Erosion Hazard Areas

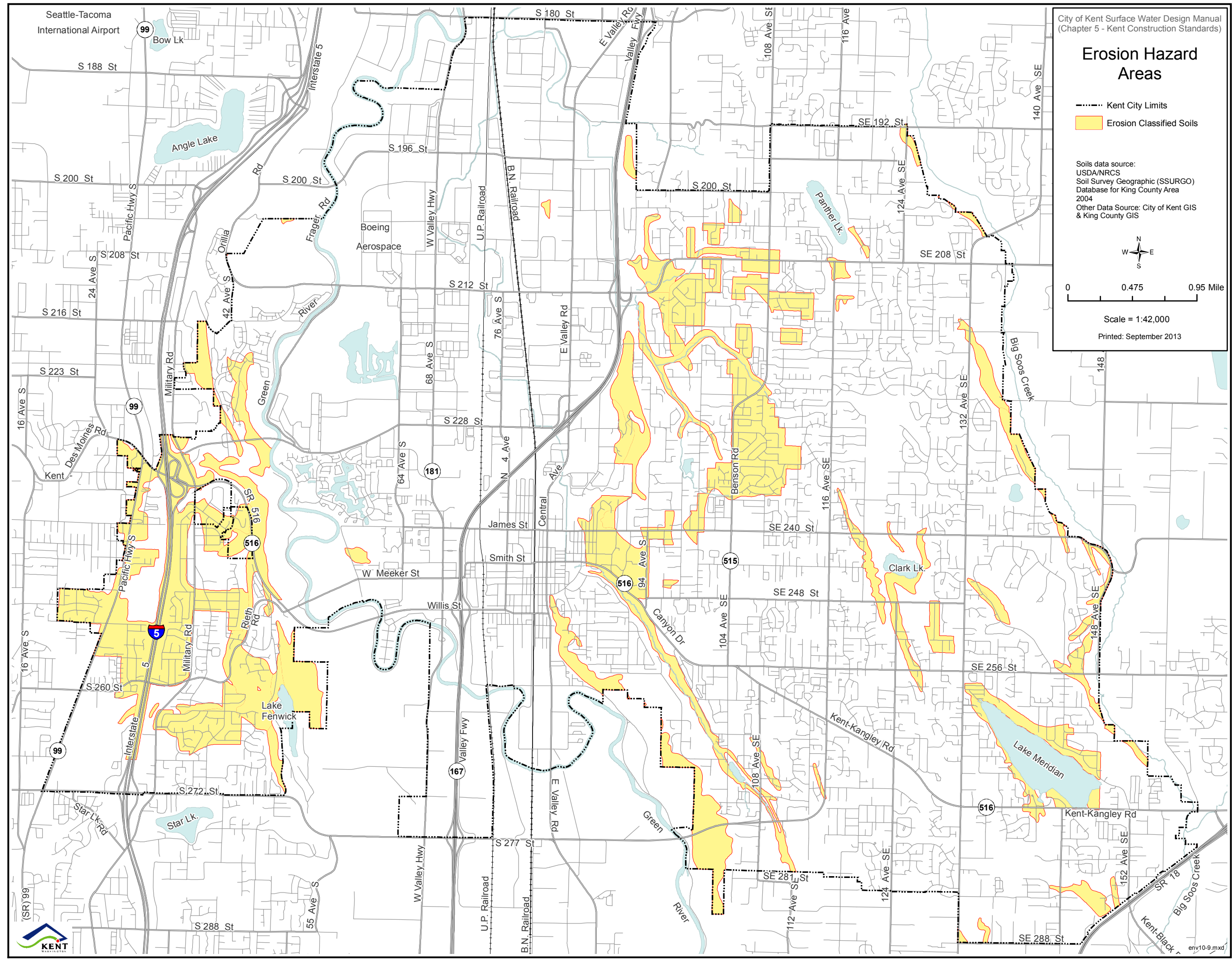
- Kent City Limits
- Erosion Classified Soils

Soils data source:  
USDA/NRCS  
Soil Survey Geographic (SSURGO)  
Database for King County Area  
2004  
Other Data Source: City of Kent GIS  
& King County GIS



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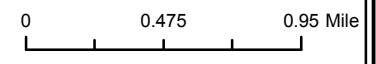


### Wetlands

- Kent City Limits
- Inventoried Wetland

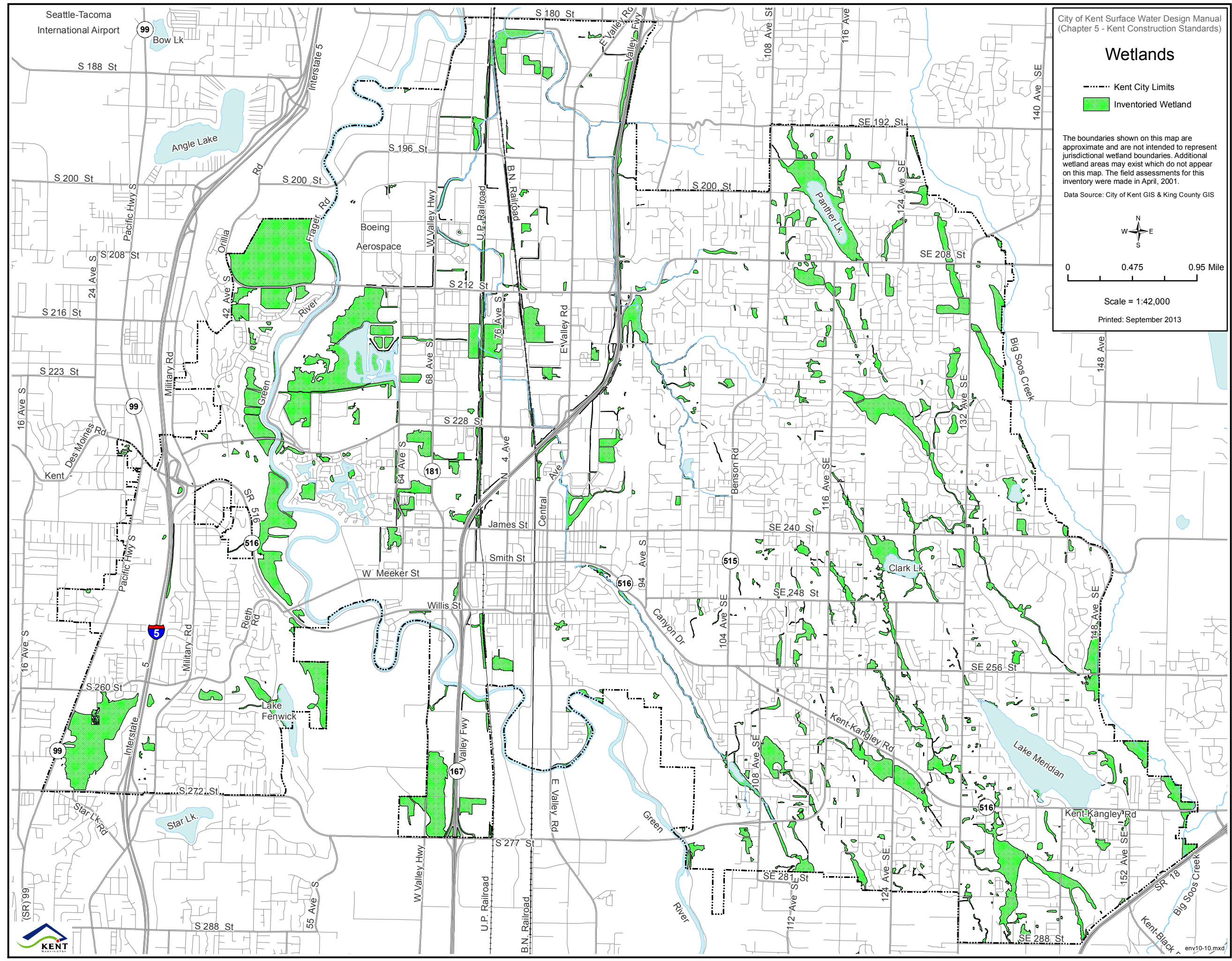
The boundaries shown on this map are approximate and are not intended to represent jurisdictional wetland boundaries. Additional wetland areas may exist which do not appear on this map. The field assessments for this inventory were made in April, 2001.

Data Source: City of Kent GIS & King County GIS



Scale = 1:42,000

Printed: September 2013





### Soils/Wellhead Areas

- Kent City Limits
- Wellhead Protection Area
- Soils - Infiltration (inches/hr.)**
- Less than 0.06
- 0.06 to 0.20
- 0.20 to 2.00
- 0.63 to 2.00
- 2.00 to 6.30
- 2.00 to 20.00
- 6.30 to 20.00
- Over 20.00
- Unclassified

Soils data source: U.S.D.A. Soil Conservation Service  
 Soil Survey For King County, Washington, 1972.  
 Wellhead data source: Aspect consulting, LLC  
 Other data source: City of Kent GIS & King County GIS

N  
 W — E  
 S

0      0.475      0.95 Mile

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