

## **Appendix C**

# **Michigan Street CSO Maps and Facility Information**

- C-1. Michigan Street CSO Drainage Maps
- C-2. Michigan Street CSO Basin Facilities
- C-3. Philips Services Company Historical Data
- C-4. Kelly Moore Historical Data
- C-5. Former Unocal Service Station No. 0907 Historical Data
- C-6. VIOX Corporation Historical Data
- C-7. Riveretz's Auto Care Historical Data

# **Appendix C**

## **Michigan Street CSO Basin**

### **Maps and Facility Information**

The Michigan Street Combined Sewer Overflow (CSO) basin covers approximately 1,900 acres, spanning west-to-east from the LDW to Beacon Avenue S. and north-to-south from S. Bradford Street (approximately two blocks south of Spokane Street) to S. Norfolk Street. Land uses within the CSO basin include industrial, residential, and commercial properties and the King County International Airport.

Sanitary, storm, and combined sewer lines within the Michigan Street CSO basin are shown on the figures included as Appendix C-1. The locations of facilities within the CSO basin with Ecology Facility/Site Identification Numbers are shown on these maps.

From 2000 to 2007, combined wastewater and stormwater overflows were discharged through the Michigan Street CSO on average eleven (11) times per year, with an annual average volume of approximately 17.6 mgy. Equipment malfunctions have led to three discharges through the Michigan CSO, in 1992, 2004, and 2006 (Tiffany 2008b).

Although COCs from individual industrial and commercial facilities within the CSO basin are significantly diluted, the cumulative effects of CSO events could contribute to recontamination of sediments associated with the Slip 2 to Slip 3 source control area. Industrial and commercial facilities discharging industrial wastes and/or stormwater to the combined sewer system are therefore considered to represent potential but relatively minor sources of sediment recontamination.

A map showing the locations and tables summarizing information regarding all facilities within the Michigan Street CSO Basin are included in Appendix C-2. Facilities within the Michigan Street CSO Basin have been identified as follows:

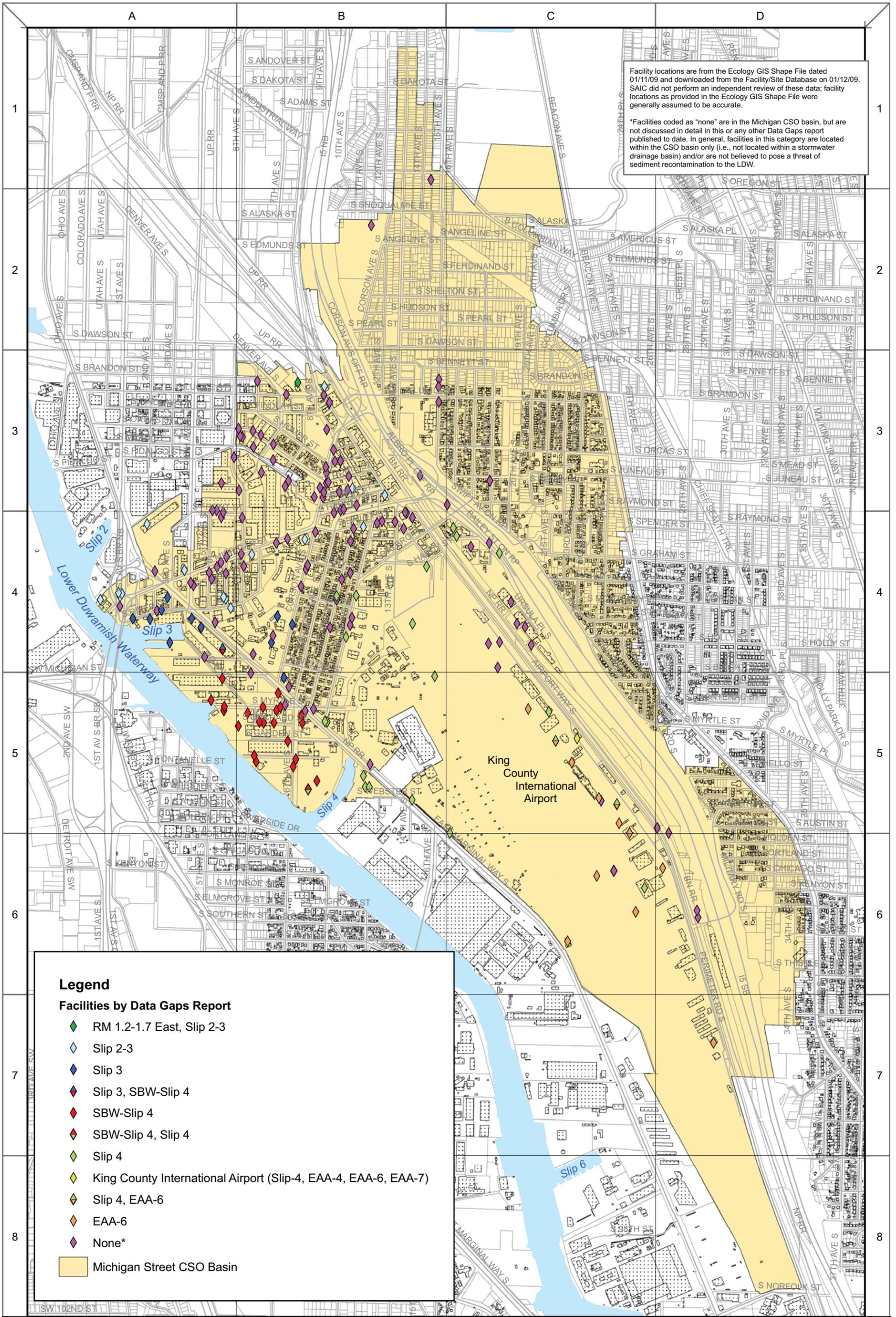
- There are 206 facilities within the Michigan Street CSO Basin that have been assigned Ecology Facility/Site ID numbers (Table C-1);
- 40 of these facilities have active EPA ID numbers (Table C-2);
- 22 of these facilities are listed on Ecology's Confirmed or Suspected Contaminated Sites List (CSCSL) (Table C-3);
- 22 of the facilities hold NPDES permits (Table C-4)
- 14 of these facilities have King County Industrial Waste (KCIW) discharge authorizations or permits (Table C-5);
- 77 of these facilities have or have had USTs or LUSTs (Table C-6)
- 22 of these facilities are on the CSCSL, not including the LDW and Slip 4 (Table C-6) and
- 15 of these facilities have been granted an NFA (Table C-7).

The SIC and NAICS codes for all 206 facilities are listed in Table C-8.

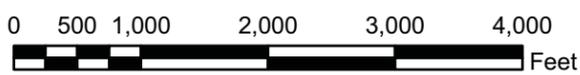
Seventy seven of the 206 facilities are included in source control area for which a Data Gaps report has been prepared, as indicated on Table C-1. Seventeen of the 206 facilities are located within the Slip 2 to Slip 3 source control area, and are discussed in Sections 4 and 5 of the current Data Gaps report. Eight facilities that are within the Michigan CSO basin are discussed in Section 6.

Appendices C-3 through C-7 provide relevant historical information for the facilities within the Michigan CSO basin that are discussed in Section 6 of this Data Gaps report.

**Appendix C-1**  
**Michigan Street CSO Drainage Maps**



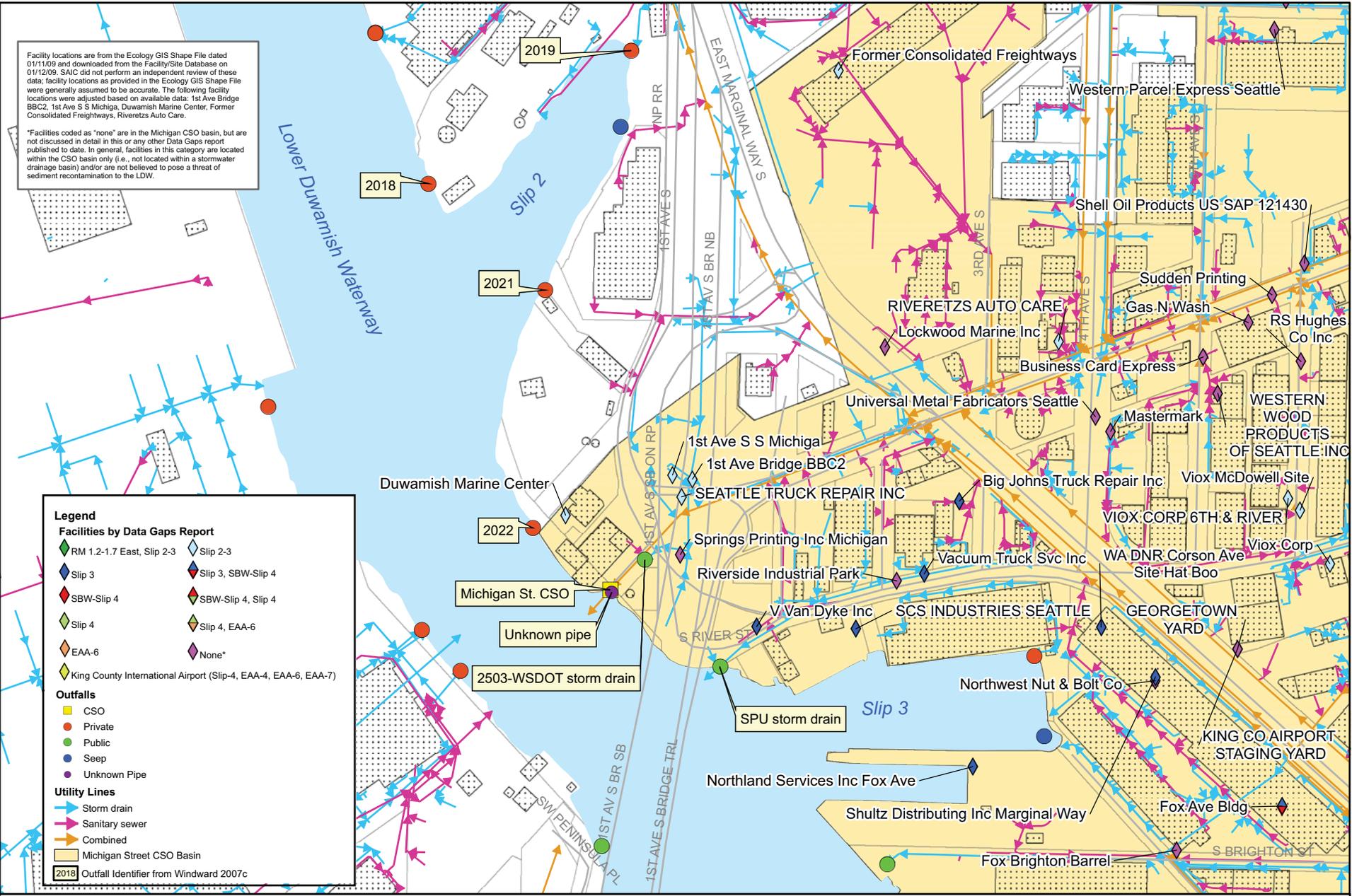
### Michigan Street CSO Drainage Features - Index Map





Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate. The following facility locations were adjusted based on available data: 1st Ave Bridge BBC2, 1st Ave S S Michiga, Duwamish Marine Center, Former Consolidated Freightways, Riveretzts Auto Care.

\*Facilities coded as "none" are in the Michigan CSO basin, but are not discussed in detail in this or any other Data Gaps report published to date. In general, facilities in this category are located within the CSO basin only (i.e., not located within a stormwater drainage basin) and/or are not believed to pose a threat of sediment recontamination to the LDW.



**Legend**

**Facilities by Data Gaps Report**

- RM 1.2-1.7 East, Slip 2-3
- Slip 2-3
- Slip 3
- Slip 3, SBW-Slip 4
- SBW-Slip 4
- SBW-Slip 4, Slip 4
- Slip 4
- Slip 4, EAA-6
- EAA-6
- None\*
- King County International Airport (Slip-4, EAA-4, EAA-6, EAA-7)

**Outfalls**

- CSO
- Private
- Public
- Seep
- Unknown Pipe

**Utility Lines**

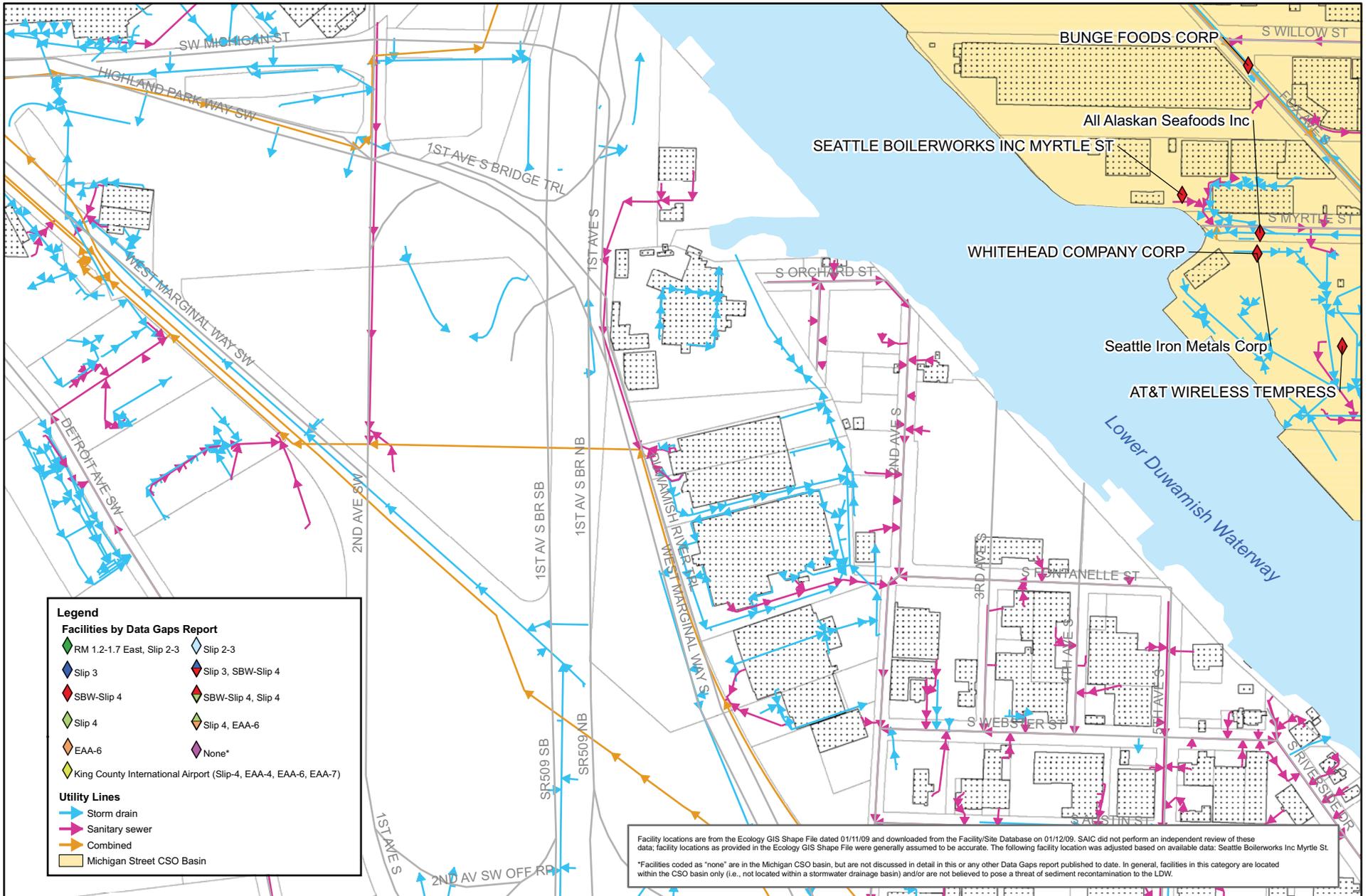
- Storm drain
- Sanitary sewer
- Combined
- Michigan Street CSO Basin

2018 Outfall Identifier from Windward 2007c



Michigan Street CSO Drainage Features - A4





**Legend**

**Facilities by Data Gaps Report**

◆ RM 1.2-1.7 East, Slip 2-3	◆ Slip 2-3
◆ Slip 3	◆ Slip 3, SBW-Slip 4
◆ SBW-Slip 4	◆ SBW-Slip 4, Slip 4
◆ Slip 4	◆ Slip 4, EAA-6
◆ EAA-6	◆ None*
◆ King County International Airport (Slip-4, EAA-4, EAA-6, EAA-7)	

**Utility Lines**

- Storm drain
- Sanitary sewer
- Combined
- Michigan Street CSO Basin

Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate. The following facility location was adjusted based on available data: Seattle Boilerworks Inc Myrtle St.

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### Michigan Street CSO Drainage Features - A5



Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate.  
 \*Facilities coded as "none" are in the Michigan CSO basin, but are not discussed in detail in this or any other Data Gaps report published to date. In general, facilities in this category are located within the CSO basin only (i.e., not located within a stormwater drainage basin) and/or are not believed to pose a threat of sediment recontamination to the LDW.

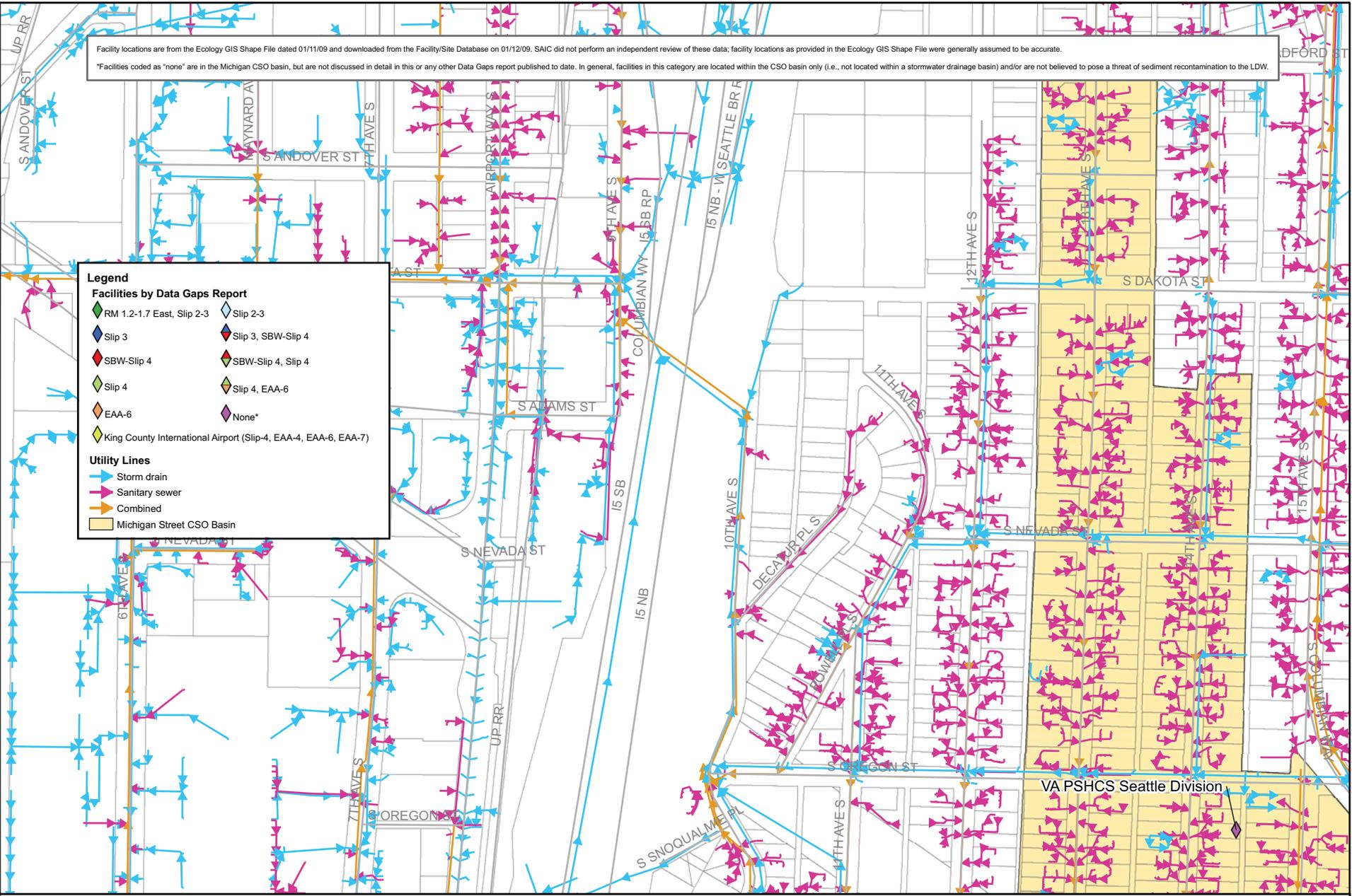
**Legend**

**Facilities by Data Gaps Report**

- ◆ RM 1.2-1.7 East, Slip 2-3
- ◆ Slip 3
- ◆ SBW-Slip 4
- ◆ Slip 4
- ◆ EAA-6
- ◆ King County International Airport (Slip-4, EAA-4, EAA-6, EAA-7)
- ◆ Slip 2-3
- ◆ Slip 3, SBW-Slip 4
- ◆ SBW-Slip 4, Slip 4
- ◆ Slip 4, EAA-6
- ◆ None\*

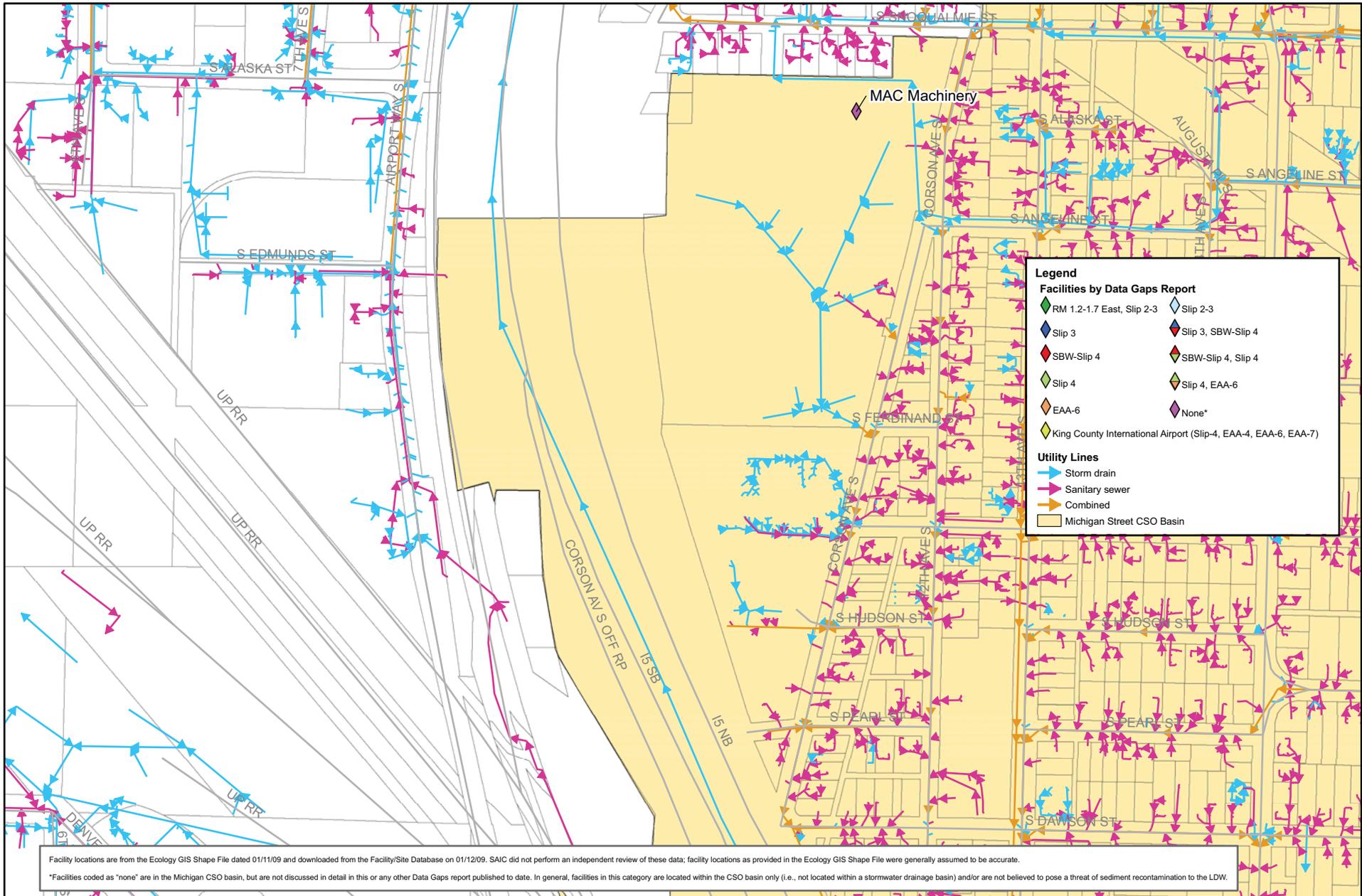
**Utility Lines**

- Storm drain
- Sanitary sewer
- Combined
- Michigan Street CSO Basin



Michigan Street CSO Drainage Features - B1





Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate.

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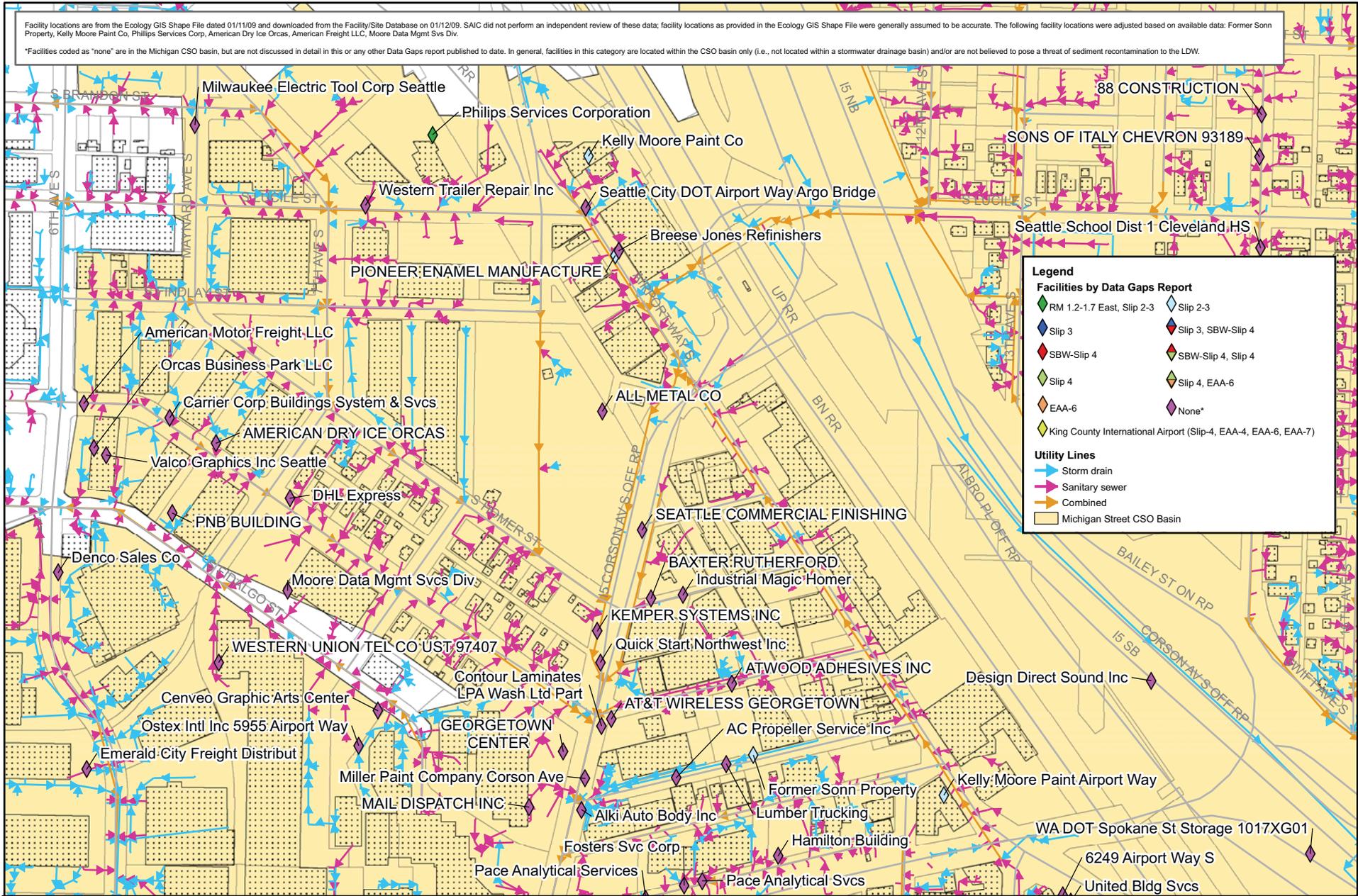


### Michigan Street CSO Drainage Features - B2



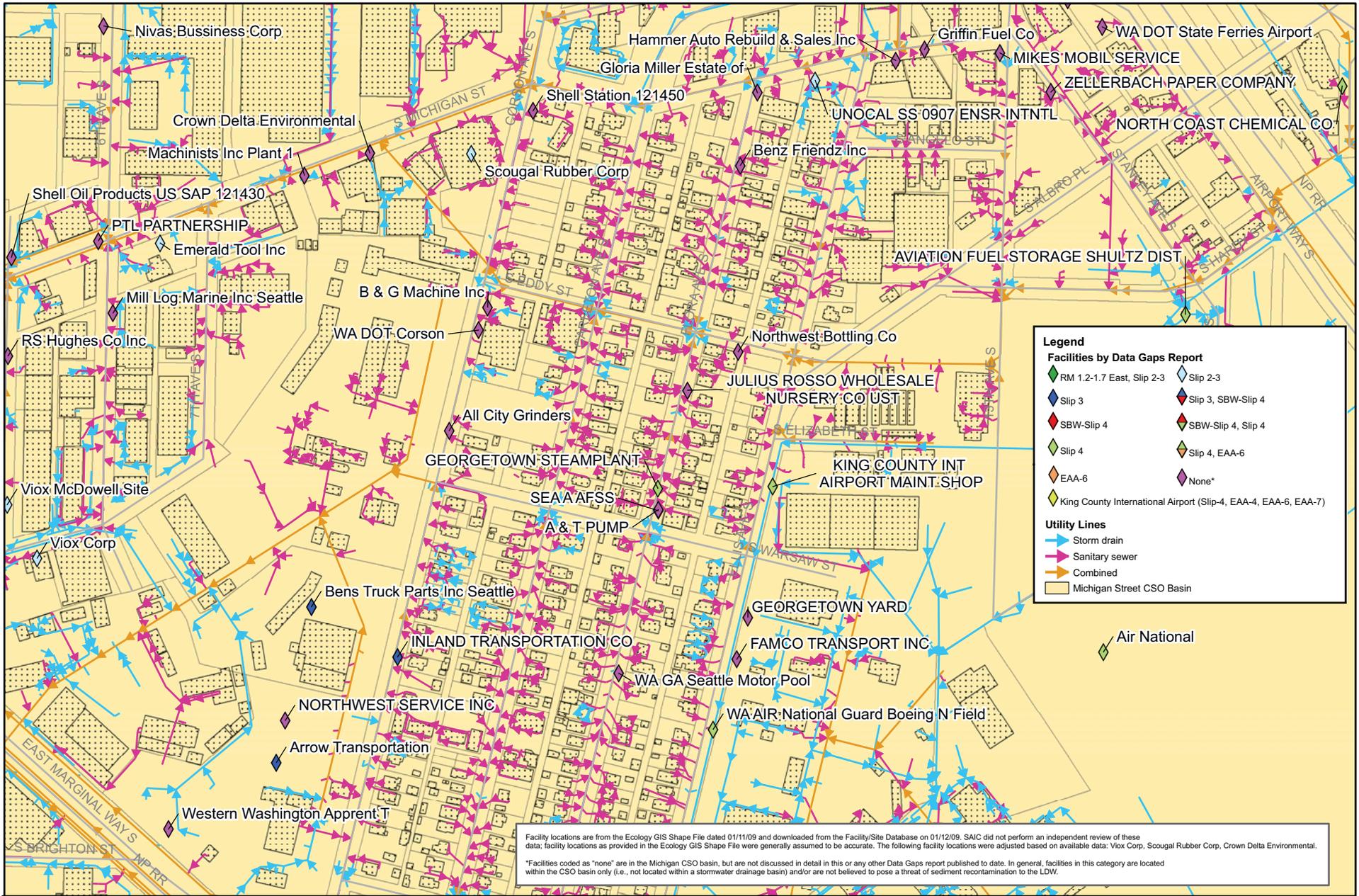
Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate. The following facility locations were adjusted based on available data: Former Sonn Property, Kelly Moore Paint Co, Phillips Services Corp, American Dry Ice Orcas, American Freight LLC, Moore Data Mgmt Svcs Div.

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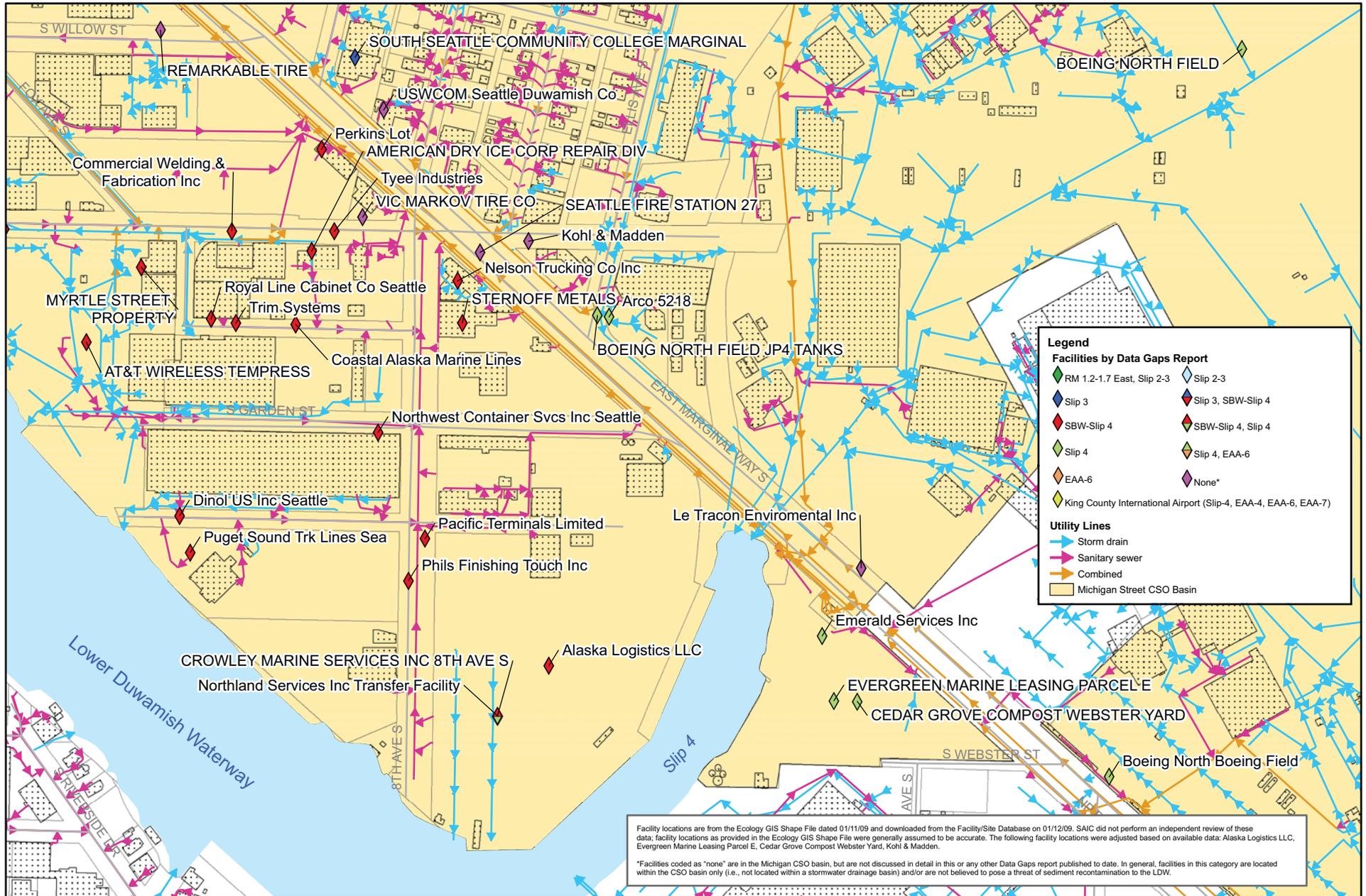
### Michigan Street CSO Drainage Features - B3





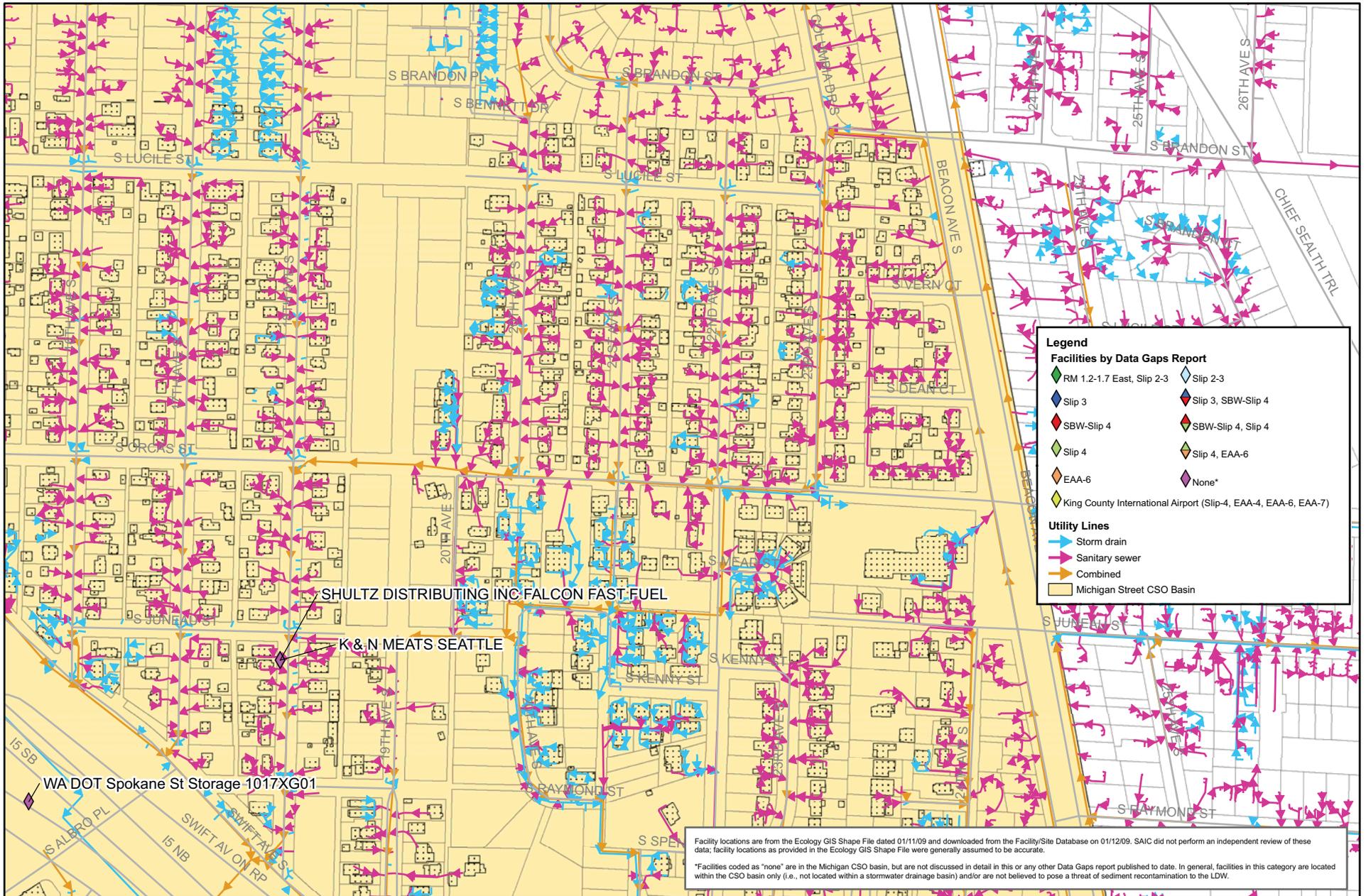
### Michigan Street CSO Drainage Features - B4





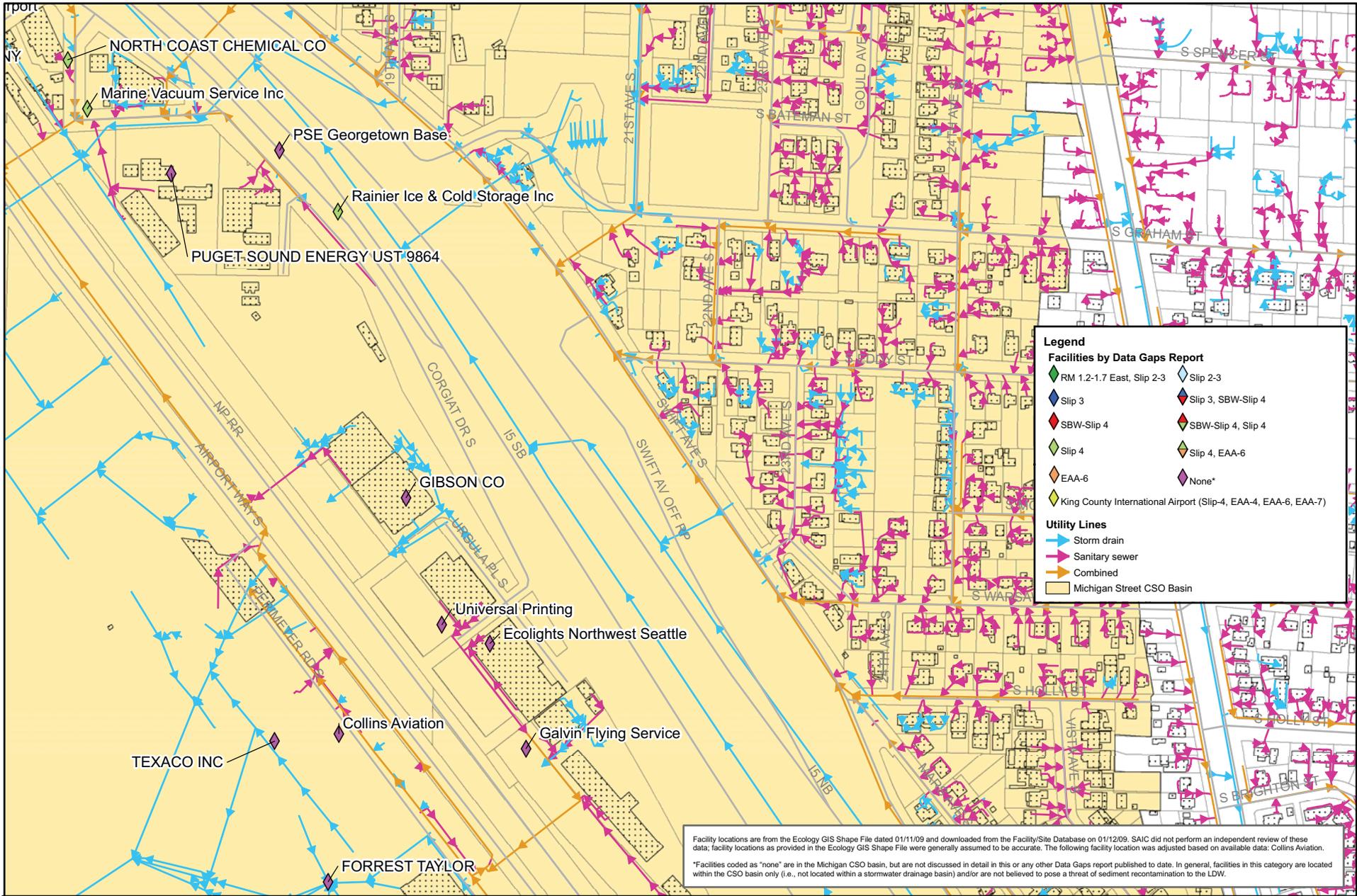
Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate. The following facility locations were adjusted based on available data: Alaska Logistics LLC, Evergreen Marine Leasing Parcel E, Cedar Grove Compost Webster Yard, Kohl & Madden.

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### Michigan Street CSO Drainage Features - C3





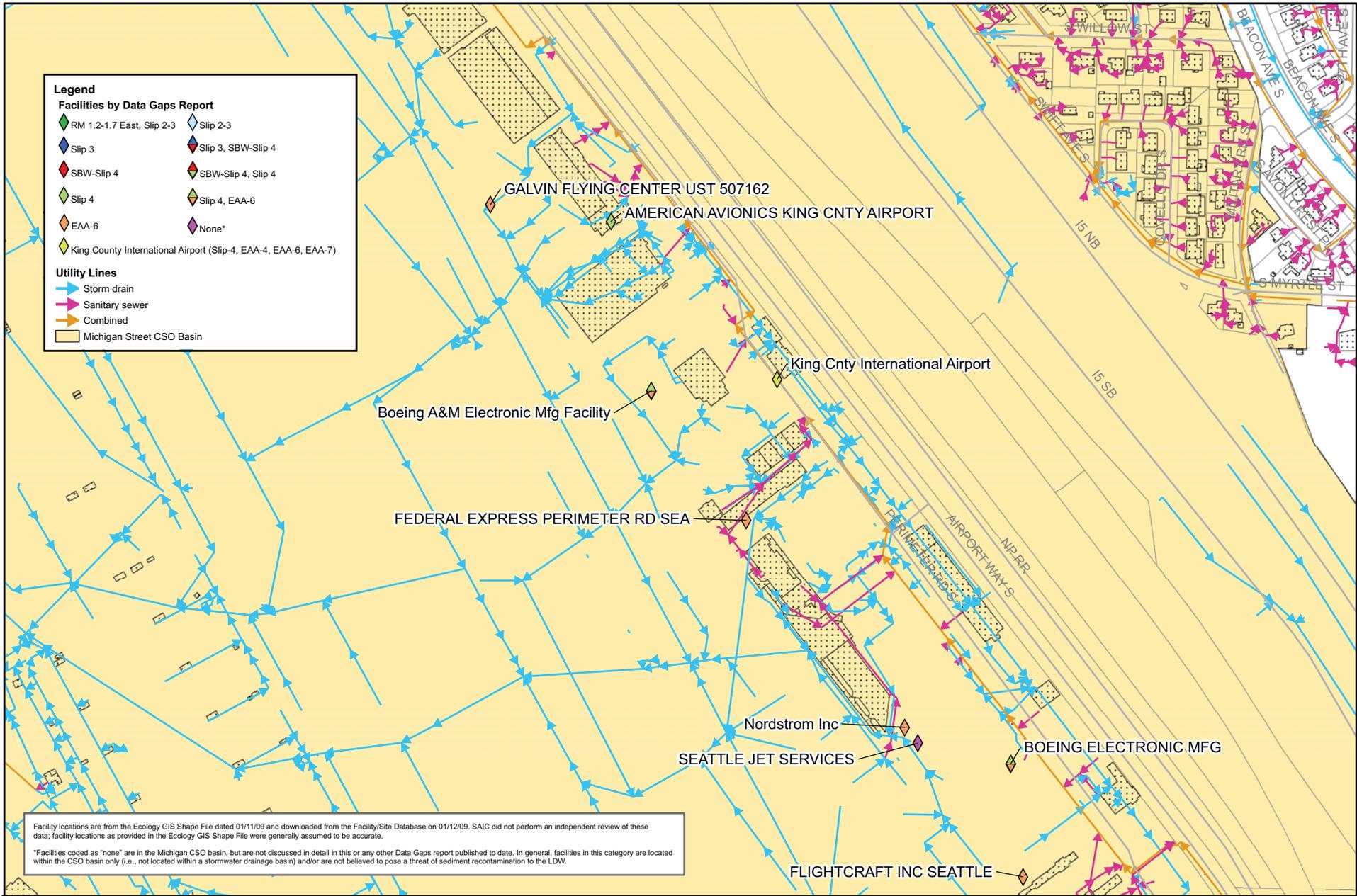
Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate. The following facility location was adjusted based on available data: Collins Aviation.

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### Michigan Street CSO Drainage Features - C4





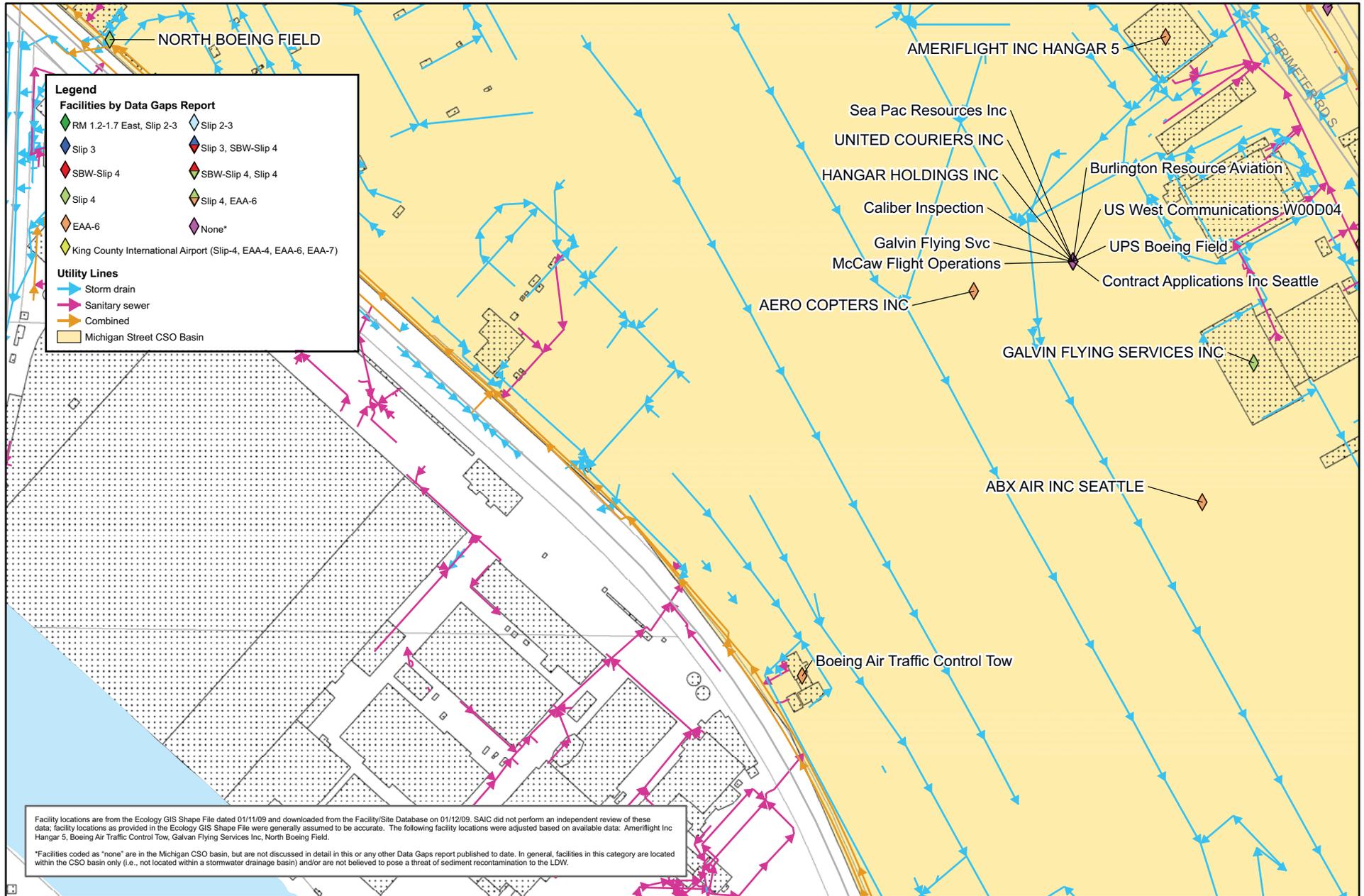
Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate.

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### Michigan Street CSO Drainage Features - C5



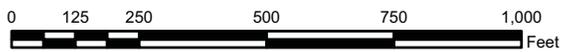


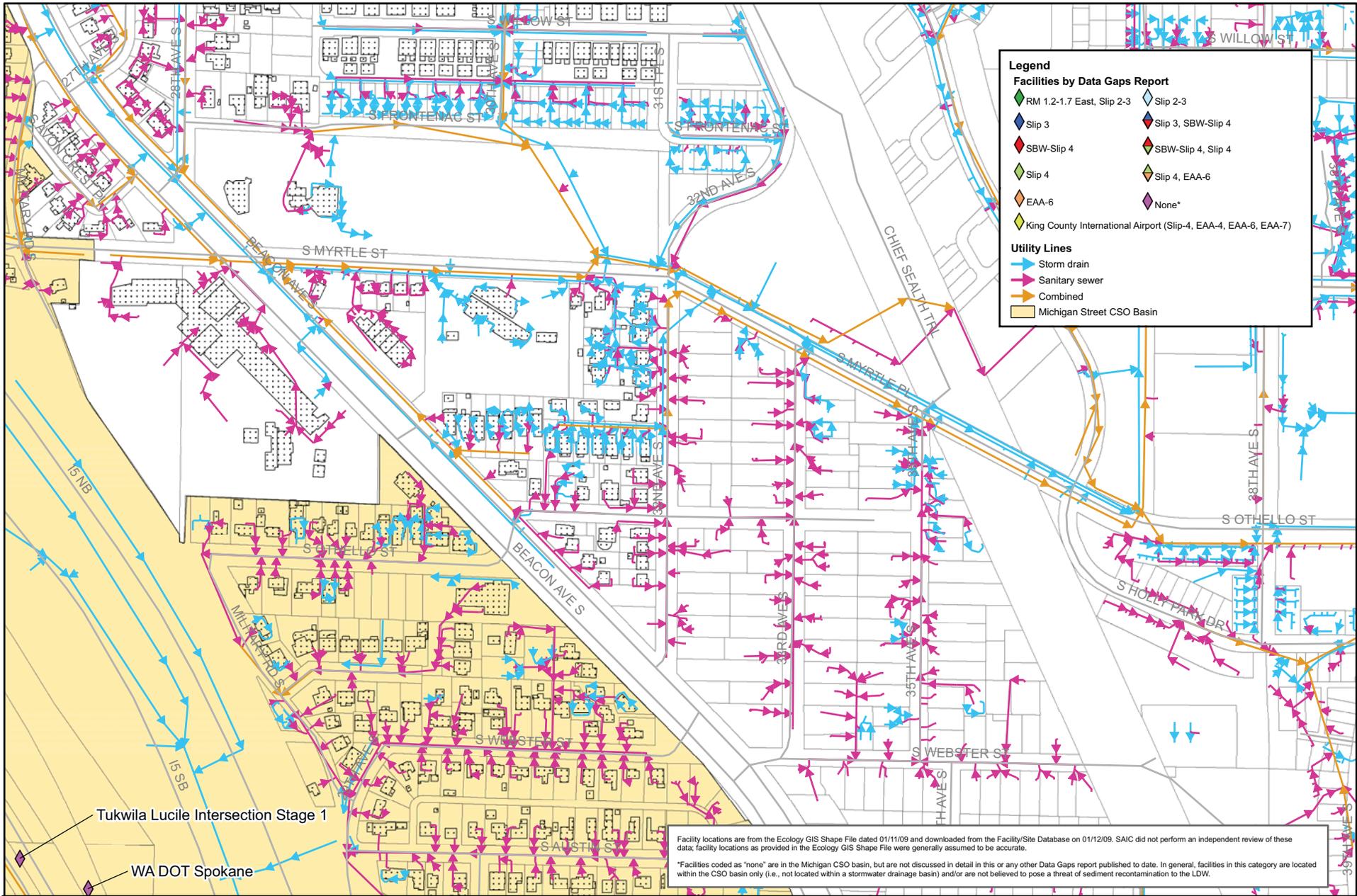
Facility locations are from the Ecology GIS Shape File dated 01/11/09 and downloaded from the Facility/Site Database on 01/12/09. SAIC did not perform an independent review of these data; facility locations as provided in the Ecology GIS Shape File were generally assumed to be accurate. The following facility locations were adjusted based on available data: Ameriflight Inc Hangar 5, Boeing Air Traffic Control Tow, Galvan Flying Services Inc, North Boeing Field.

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### Michigan Street CSO Drainage Features - C6

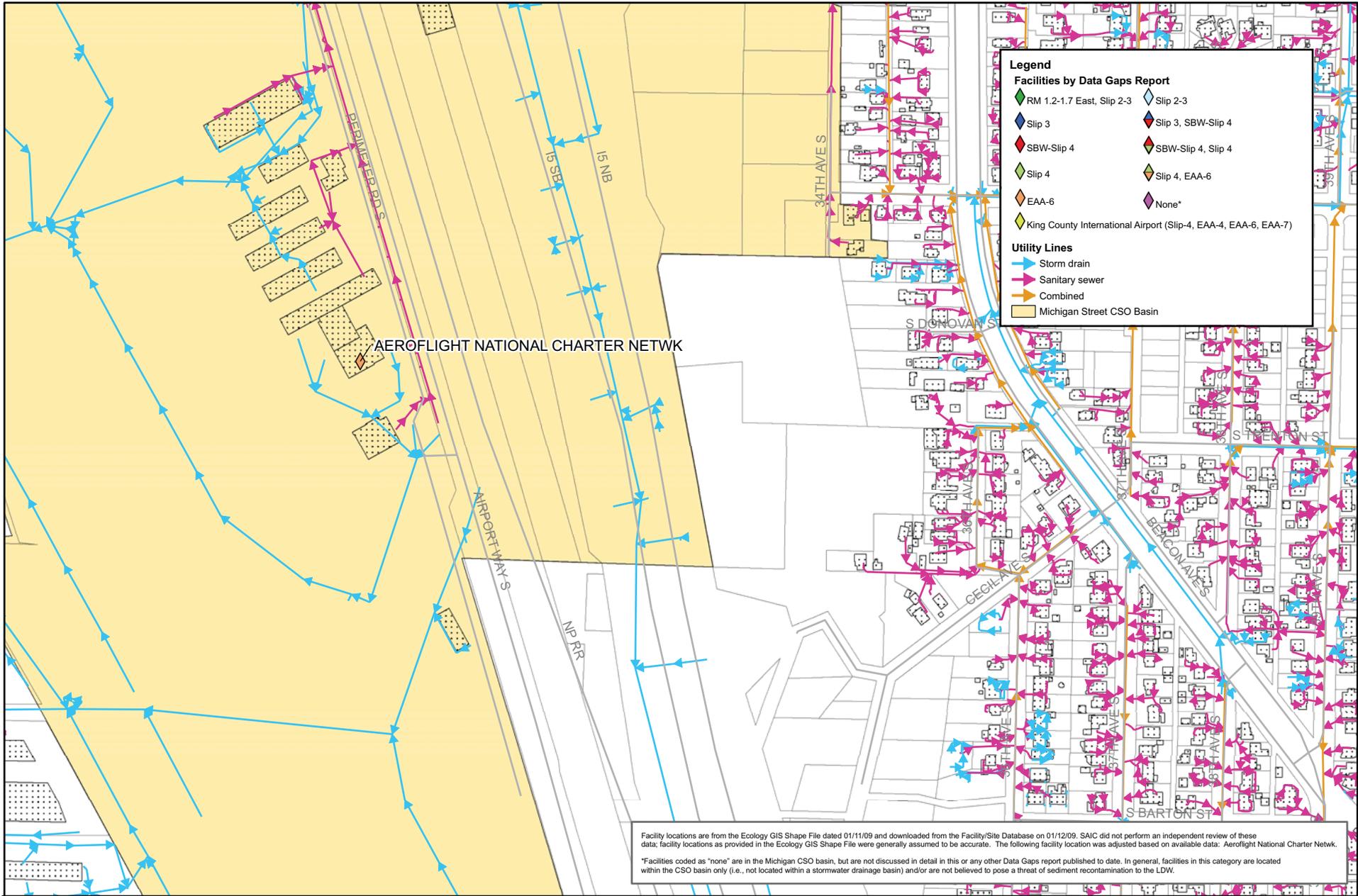




### Michigan Street CSO Drainage Features - D5







### Michigan Street CSO Drainage Features - D7

