

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
SUMMARY OF INVENTORY FINDINGS:

Spokane River Dissolved Oxygen Total Maximum Daily Load

October 15, 2013

Introduction

Special Condition S6 of the Washington State Department of Transportation (WSDOT) National Pollution Discharge Elimination System (NPDES) Municipal Stormwater Permit (Permit) requires compliance with applicable Total Maximum Daily Loads (TMDLs). Appendix 3 of WSDOT’s Permit lists applicable TMDLs and the action items and implementation timelines assigned to WSDOT for each.

This report summarizes the findings of discharge inventory work performed within the Spokane River Dissolved Oxygen TMDL boundary. This work aimed to identify WSDOT’s stormwater discharge locations and potential sources of phosphorus and ammonia within WSDOT’s right-of-way inside the NPDES Phase II coverage area.

Table 1. Summary and dates of work performed in the Spokane River Dissolved Oxygen TMDL

Work Performed	Date Started	Status
Inventory of highway discharge locations	3/14/2012	Completed 9/15/2013
Illicit discharge detection and elimination (IDDE)	3/14/2012	Completed 5/20/2013*
Basic source identification for pollutants of concern	3/14/2012	Completed 5/20/2013

*Denotes date in which potential illicit discharges and/or illicit connections were entered into WSDOT’s IDDE tracking database. Potential IDDE’s are pending resolution. If WSDOT is unable to achieve resolution, the issue will be turned over to the local jurisdiction or the Department of Ecology (Ecology) for resolution. For more information on WSDOT’s IDDE process, go to: <http://www.wsdot.wa.gov/Environment/WaterQuality/default.htm#IllicitDischarge>.

Figure 1 presents discharge points and incoming connections identified during field work within the Phase II coverage area inside the TMDL boundary. Figure 2 shows the two potential pollutant source locations identified during field work and areas that are under construction.

Potential Source Locations and Illicit Discharges/Connections

Source identification is the process of visually identifying potential pollutant sources that originate in or are conveyed through WSDOT’s stormwater conveyance system prior to discharge to a TMDL-listed water body. Illicit discharges or illicit connections are observed discharges or spills not composed entirely of clean stormwater, or any unauthorized physical connection (pipe, ditch, etc.) to WSDOT’s system. For more information regarding TMDL source identification and IDDE procedures, refer to section 6.3 - 6.5 in the [Standard Operating Procedures for Data Collection in Total Maximum Daily Load Areas](#) (pdf).

Areas Under Construction During Inventory

Several stretches of highway within the Phase II coverage area and inside the TMDL boundary were under construction during field data collection. Active construction project boundaries are shown in Figure 2. Data was collected for all highway segments where construction was complete during field

work. However, areas of active construction were inaccessible and therefore data gaps exist. These areas will be revisited when construction is complete.

Determining Jurisdiction for Mapping within the Cities of Spokane and Spokane Valley

Within the Phase II coverage area and inside the Spokane River Dissolved Oxygen TMDL boundary, many centerline miles of city streets also function as state highways. Responsibility for discharge inventory within such areas was determined per RCW 47.24 and the “City Streets as Part of State Highways” agreement that states “within all cities, regardless of population, the state shall solely maintain the structural integrity of box culverts, multiplates and individual culverts greater than 60 inches in width that are within rights of way *and are not part of an enclosed drainage system.*” Therefore, the responsibility for mapping the enclosed drainage system on managed access highways within the cities of Spokane and Spokane Valley lies with the city. In compliance with the NPDES Eastern Washington Phase II Municipal Stormwater Permit, the cities of Spokane and Spokane Valley were required to complete mapping within the Phase II permit area by February 15, 2012. That information is not included in this report. *Figure 1* contains a map of these areas.

Figure 1. Map of surface water discharges, incoming connections, and managed access areas on WSDOT state routes in the Spokane River Dissolved Oxygen TMDL

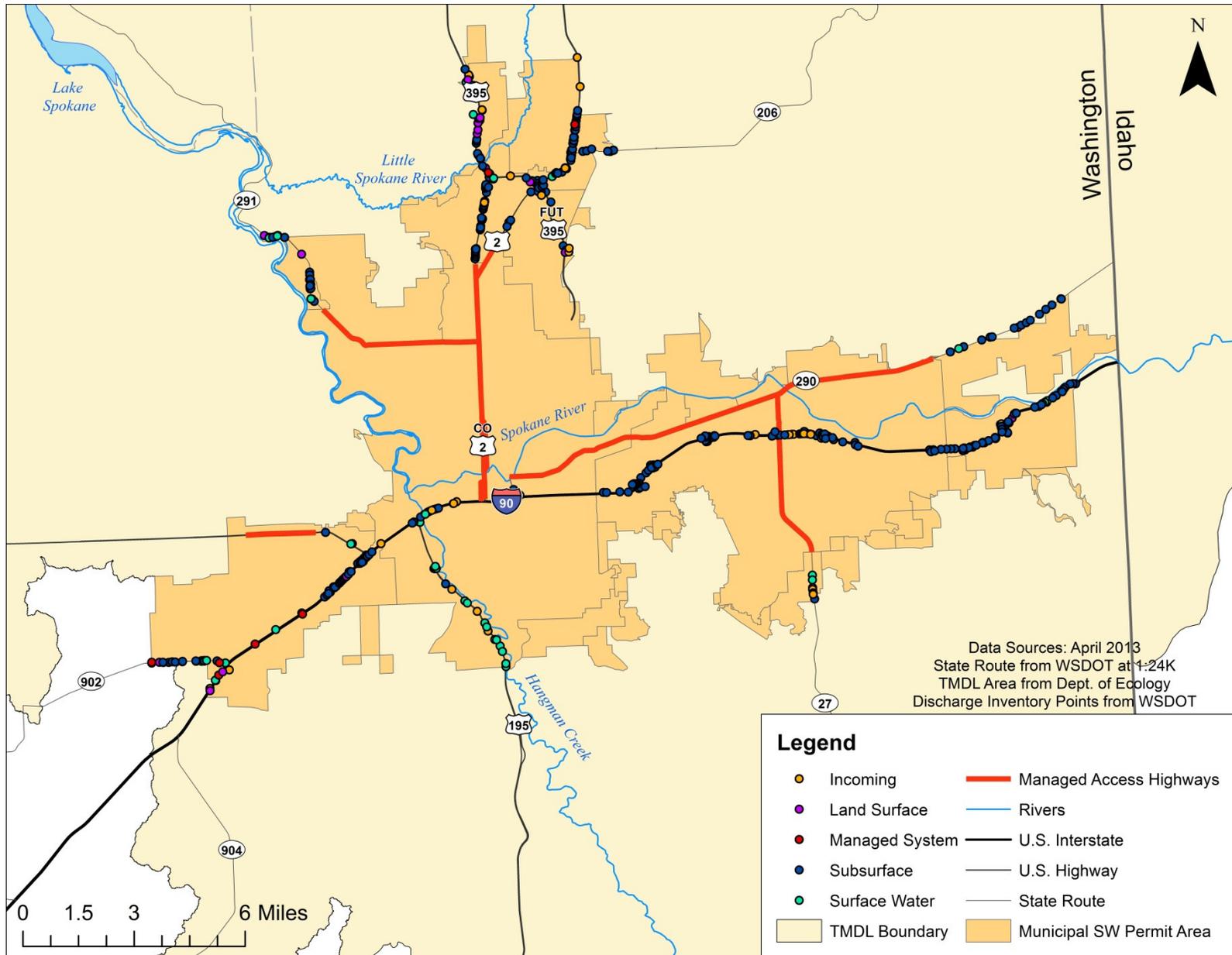
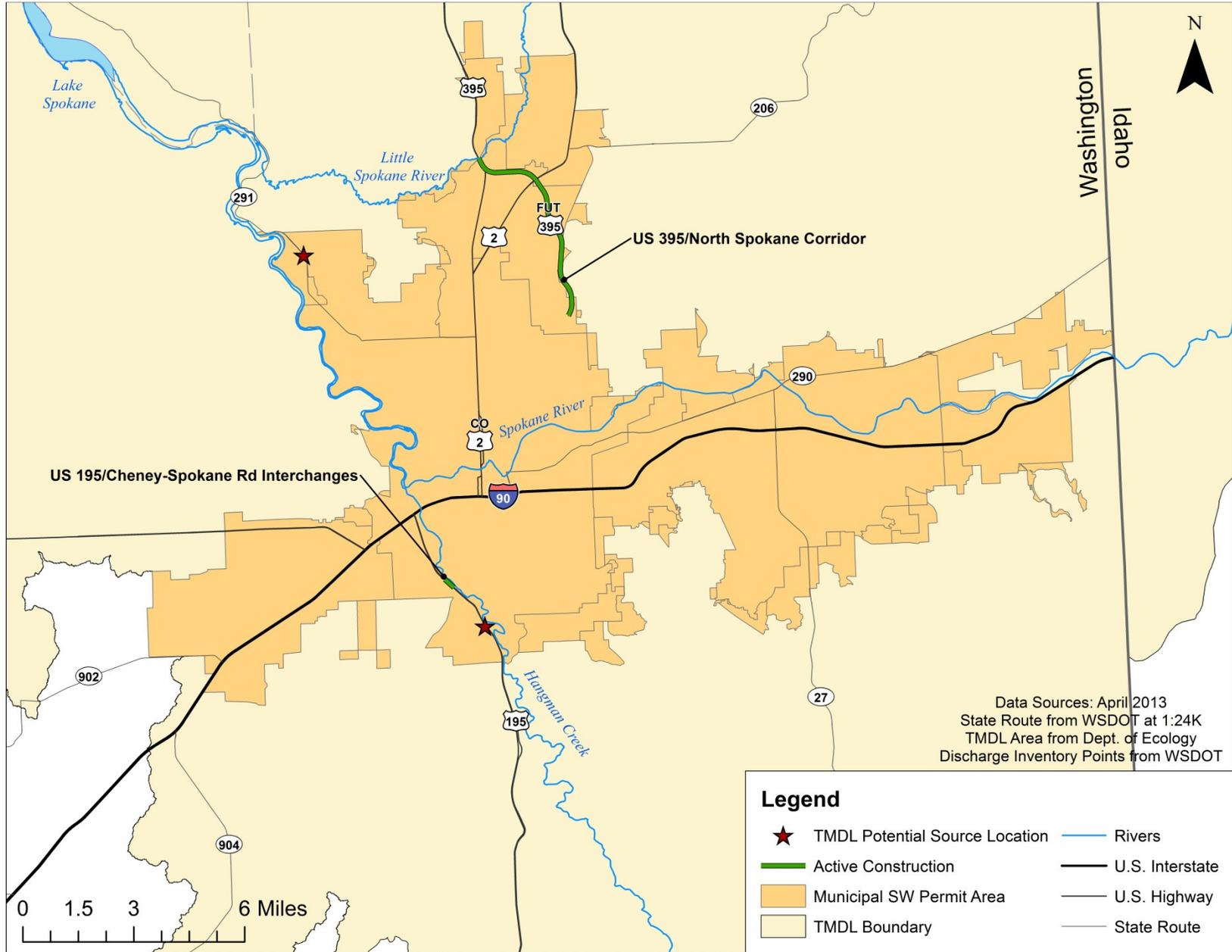


Figure 2. Map of potential pollutant sources and areas under construction on WSDOT state routes in the Spokane River Dissolved Oxygen TMDL



Summary of Potential Pollutant Source Locations and Actions

WSDOT identified the following potential source locations (shown on Figure 2) during the inventory field work described in *Table 1*. Below is a brief summary of the potential source, actions taken or yet to be taken to address the issue, and photographs.

- **Potential source description**

SR 195 Milepost 92.3 (47.602008, -117.412447) – **Dissolved Oxygen/Nutrient Concern** – 24 inch plastic pipe accepting runoff from Eagle Ridge Par 3 golf course (Address 5840) crosses under frontage road (S. Meadow Lane) and discharges to WSDOT catch basin.



- **Follow up action taken**

It was determined that this connection is permitted and is therefore not an illicit connection. No evidence of excessive fertilization or nutrient loading observed. WSDOT no longer considers this area to be a concern.

- **Potential source description**

SR 291 Milepost 6.1 (47.749522, -117.509183) – **Dissolved Oxygen/Nutrient Concern** – Sundance Golf Course drains towards WSDOT roadside ditch. Vegetation growth in WSDOT's right-of-way possibly caused by interaction with golf course irrigation system or fertilizer use.



Follow up action taken

It is likely that the vegetation growth in this area is due to overspray from the irrigation system. No evidence of excessive fertilization or nutrient loading observed. WSDOT no longer considers this area to be a concern.

Other Data Available Upon Request

The following more detailed information, not included in this summary, is available upon request:

- Discharge points located outside the municipal permit area, but within the Spokane River TMDL boundary
- Photos of all discharge points
- Field books with field notes taken for all discharge points
- Contact the Cities of Spokane and Spokane Valley for mapping information within managed access highway areas