

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
SUMMARY OF INVENTORY FINDINGS:

Palouse River Fecal Coliform Total Maximum Daily Load

January 5, 2015

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 and source identification work performed within the Palouse River Fecal Coliform TMDL boundary. This work aimed to identify WSDOT's stormwater discharge locations and potential sources of fecal coliform and sediment within WSDOT's right-of-way in accordance with action items assigned to WSDOT in the TMDL.

Table 1. Summary and dates of work performed in the Palouse River Fecal Coliform TMDL

Work Performed	Date Started	Status
Inventory of highway discharge locations	4/14/2014	Complete 5/2/2014
Illicit discharge detection and elimination (IDDE)	4/14/2014	Complete 5/2/2014
Basic source identification for pollutants of concern	4/14/2014	Complete 5/2/2014
Identification of maintenance issues	4/14/2014	Complete 5/2/2014

*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 TMDL boundary. Figure 2 shows the potential pollutant source locations that are further described below.

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).

Determining Jurisdiction for Mapping within the Cities

Cities Outside of Phase II Permit Coverage Areas

Cities outside of the Phase II Permit coverage area (including the City of Colfax) are not required to conduct system mapping but maintain jurisdiction and maintenance responsibilities on highways through their city limits. System mapping and source identification was conducted by WSDOT outside of the Phase II Permit coverage areas but within the TMDL boundary to fulfill WSDOT's assigned action items for the TMDL in Appendix 3 of WSDOT's Permit. WSDOT will work with the City of Colfax to address any maintenance issues, IDDEs or potential pollutant sources that fall within WSDOT right-of-way and the city limits, shown in *Figure 2*.

Figure 1. Map of surface water discharge points, incoming connections and managed access areas on WSDOT state routes in the Palouse River Fecal Coliform TMDL.

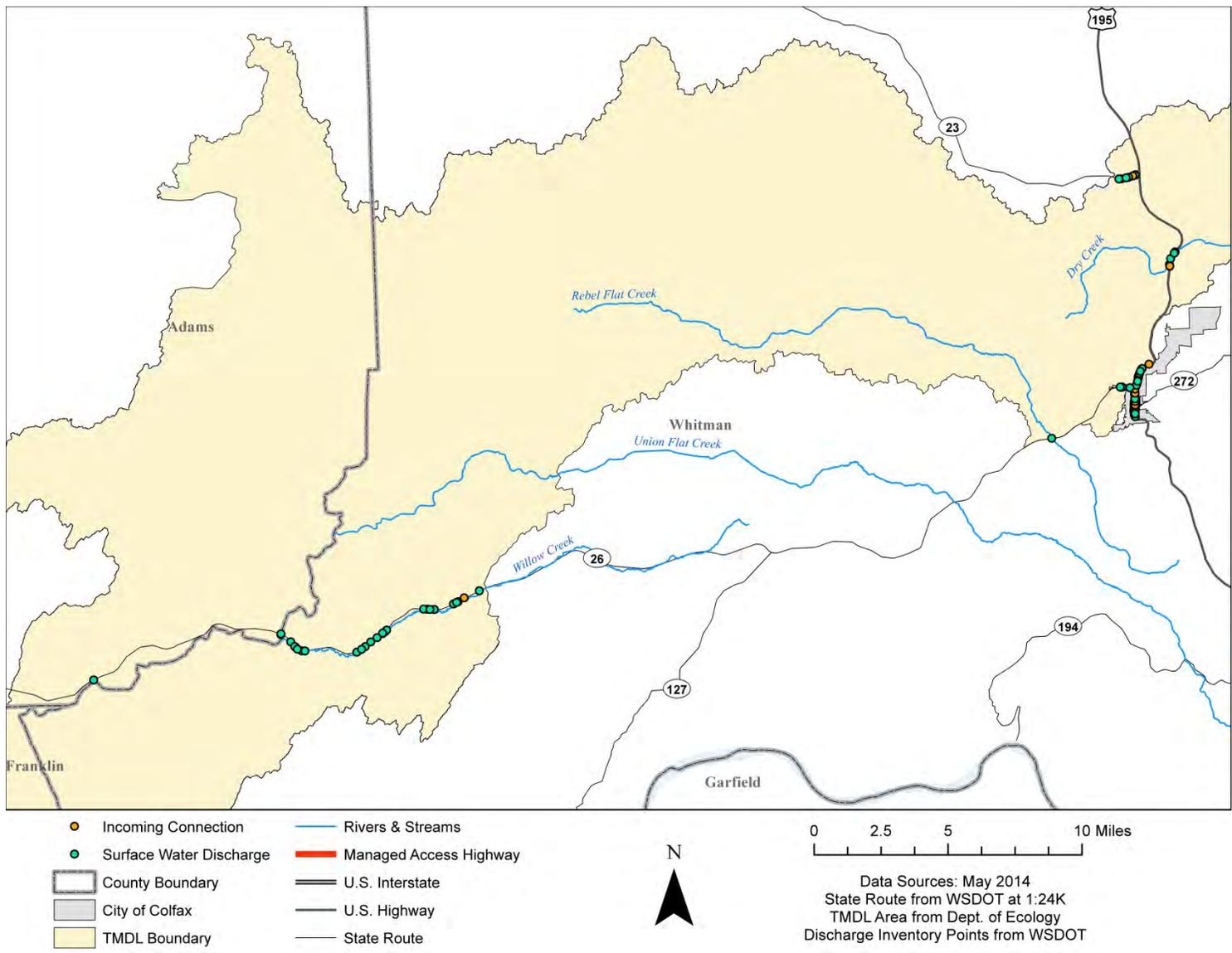
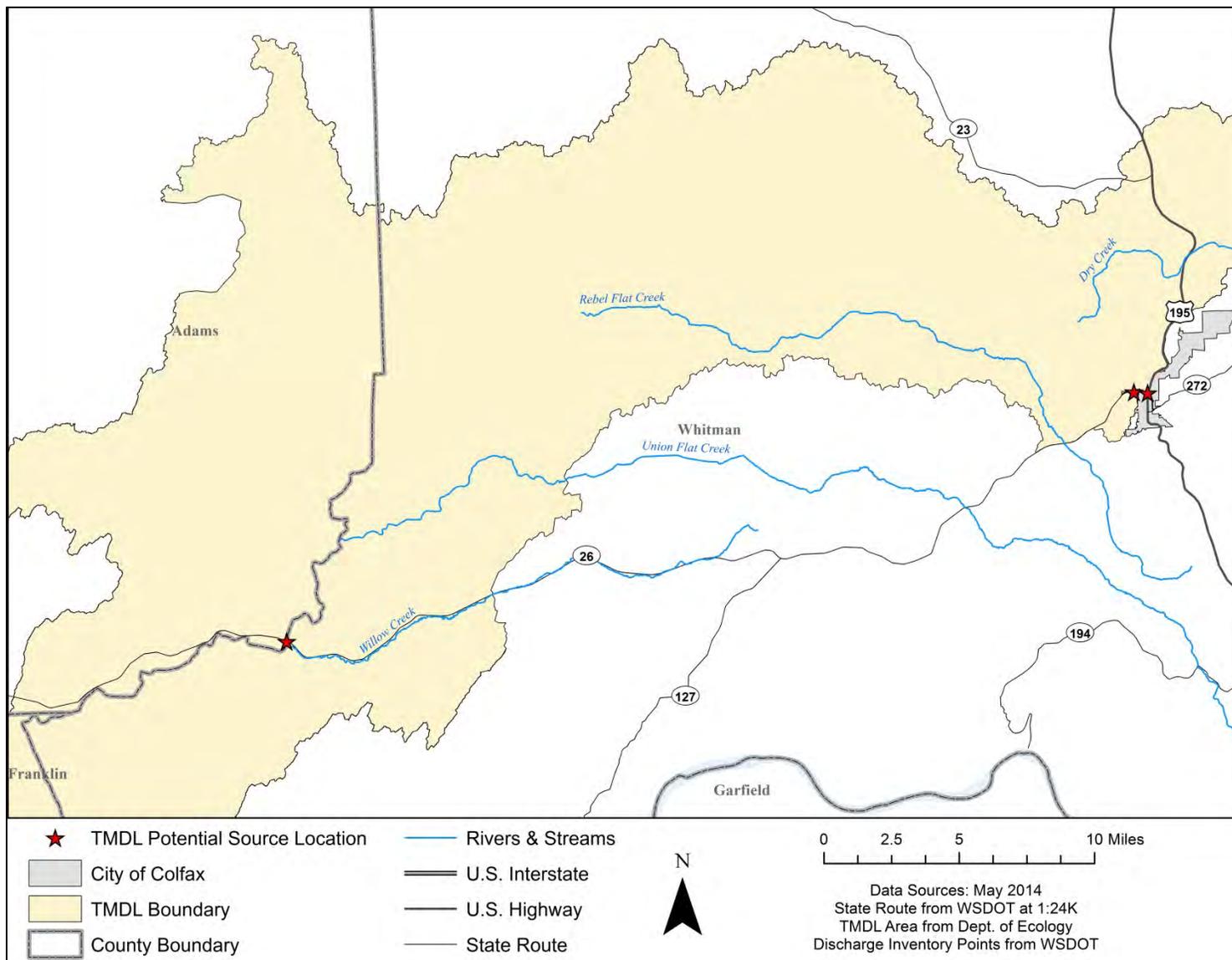


Figure 2. Map of potential pollutant sources on WSDOT state routes in the Palouse River Fecal Coliform TMDL



Summary of Potential Source Locations and Actions

A total of six potential fecal coliform and sediment source locations were documented during the 2014 field season (*Figure 2*). Two categories of potential source locations were identified:

- **WSDOT maintenance locations.** WSDOT maintenance staff was informed of the 11 identified structures. Ten structures were cleaned in early October 2014. The remaining structure was associated with a WSDOT maintenance facility discharging sediment and debris to roadway ditches. WSDOT maintenance staff report that the facility has a septic tank leakage issue that will be fixed in the summer of 2015 (must wait until summer due to high water table). Additionally, there is a gravel approach road upslope of the ditches, which results in sediment deposition in the ditches. The culverts are plugged so the ditches won't discharge, and instead are acting as an infiltration trench.
- **Potential fecal coliform/sediment source locations.** A description of the potential source locations, a summary of actions taken or yet to be taken, and photographs are included below.

WSDOT identified the following potential source locations (shown on *Figure 2*) during the inventory field work described in *Table 1*.

- **Potential source description**

SR 26 at Milepost 96.87 (46.773603, -118.041961) – **Fecal Coliform Concern** – Field crews suspect that mud swallows (or other birds) may be nesting under the bridge. Guano was observed on the bridge structure



- **Follow up action taken**

WSDOT staff accessed the underside of the structure on 11/10/14 and observed mud swallow nests. We believe the birds are causing a fairly minor impact. Mud swallows are protected under the Migratory Bird Act, preventing us from disturbing them during nesting. However, there may be opportunity to remove the nests in association with maintenance work during the winter months when the swallows are not present, where feasible. It is likely that the birds would return even if nests were removed.

- **Potential source description**

SR 26 Milepost 132.99 (46.890869, -117.374934) – **Fecal Coliform Concern** – Field crews suspect that mud swallows (or other birds) may be nesting under the bridge. Guano was observed on the bridge structure.



Follow up action taken

WSDOT staff accessed the underside of the structure on 11/10/14 and observed mud swallow nests. We believe the birds are causing a fairly minor impact. Mud swallows are protected under the Migratory Bird Act, preventing us from disturbing them during nesting. However, there may be opportunity to remove the nests in association with maintenance work during the winter months when the swallows are not present, where feasible. It is likely that the birds would return even if nests were removed.

• **Potential source description**

SR 195 at Milepost 38.51 (46.890046, -117.364286) – **Fecal Coliform Concern** – Field crews observed pigeons roosting in the stormwater outfall pipes located under on the north and southbound sides of SR 195 (2 bridges).



Follow up action taken

WSDOT staff accessed the underside of the structures on 11/10/14 and observed some minor bird guano in the outlet pipe on the west side of the bridge and some on a ledge on the east side. We do not think it is feasible to safely exclude birds from the pipe as netting or grates could catch debris and block water. The City of Colfax owns the pipe in question.

Other Data Available Upon Request

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

- Descriptions and photos of potential maintenance concern locations
- Photos of all discharge points
- Field books with field notes taken for all discharge points