

## 11.0 CITY OF LILYDALE

The City of Lilydale is located on top of the Minnesota River bluffs and has experienced several landslides in recent years (Jennings 2016). The 2008 Inventory identified 11 gullies within the City of Lilydale. Upon review of the 2008 Inventory, nine of those sites were removed from the Project because they fell outside of the LMRWD boundary (**Figure 113**). No additional gullies or pipe outfalls were identified or evaluated in Lilydale as part of the Project; the four previously identified pipe outfall sites were resurveyed.

### 11.1 Previous Restoration Efforts

No specific gully stabilization projects were identified by the city; however, in 2017, a \$30,000 slope stabilization project was completed on the bluffs, although the exact location could not be confirmed (Greening 2013).

### 11.2 Field Survey Discussion

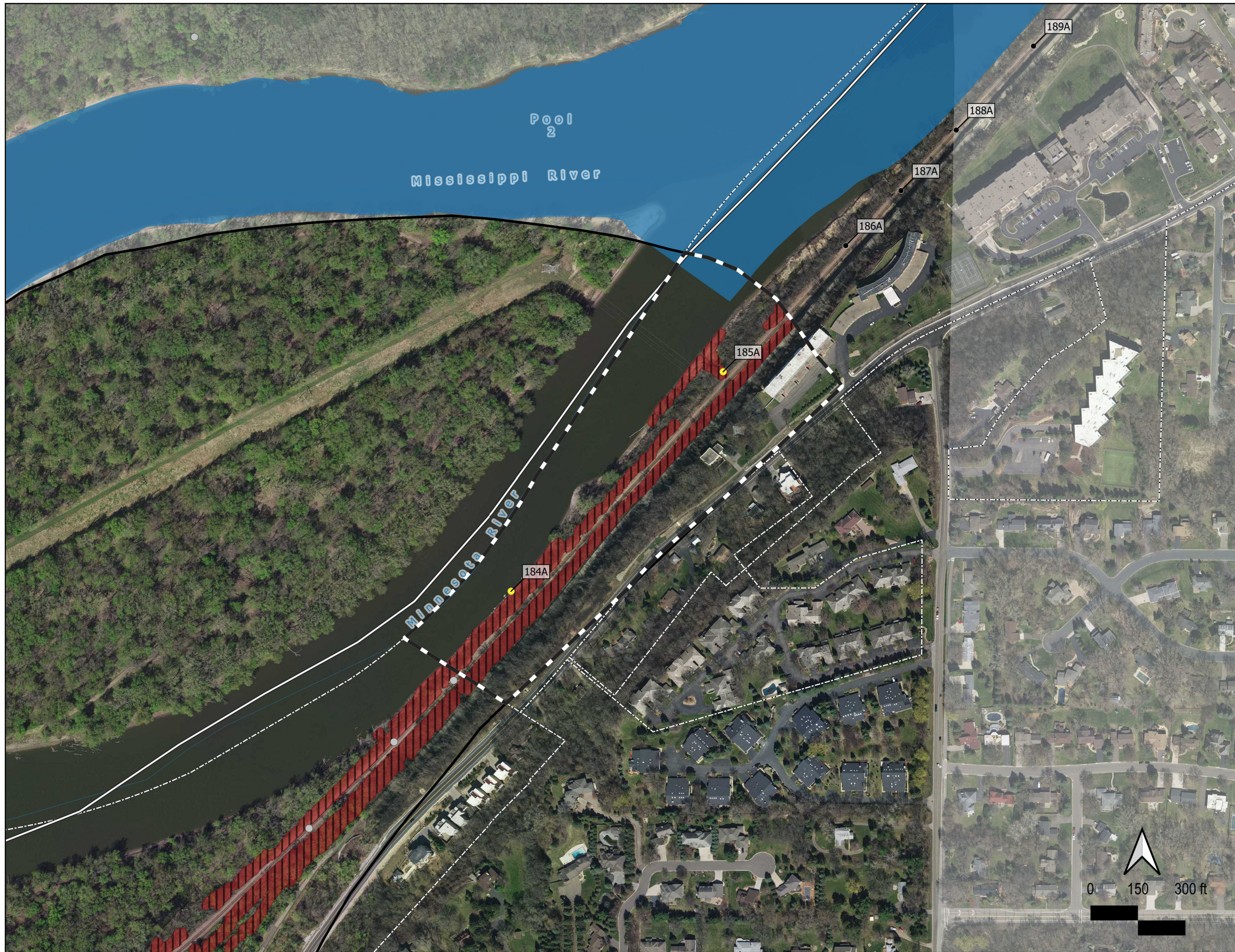
Four pipe outfalls noted in the 2008 Inventory were visited. These pipes drain water underneath the Union Pacific freight railroad tracks toward the Minnesota River. However, steep slopes along the tracks impaired visibility and access to the outlet pipes. At Site L349, a steep chute drains water from the river bluffs toward the pipe running beneath the railroad (**Figure 114**).

### 11.3 Lilydale High-Priority Sites

No gullies were located within the City and all of the pipe outfalls surveyed were in adequate condition based on the condition assessment of unstable drainage features and no needed repairs were identified, so no high-priority sites have been identified at this time (**Figure 115**).



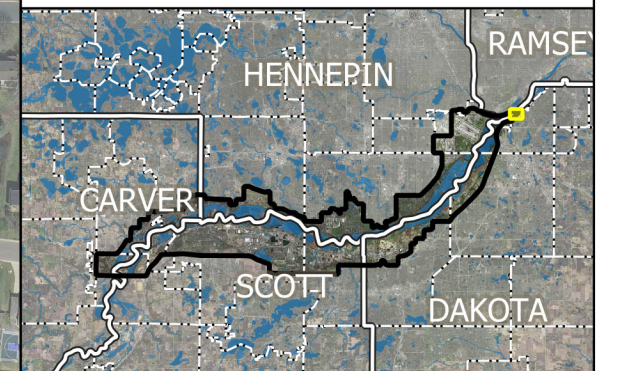
**Figure 113:  
Lilydale 2008  
Inventory Locations**



**LEGEND**

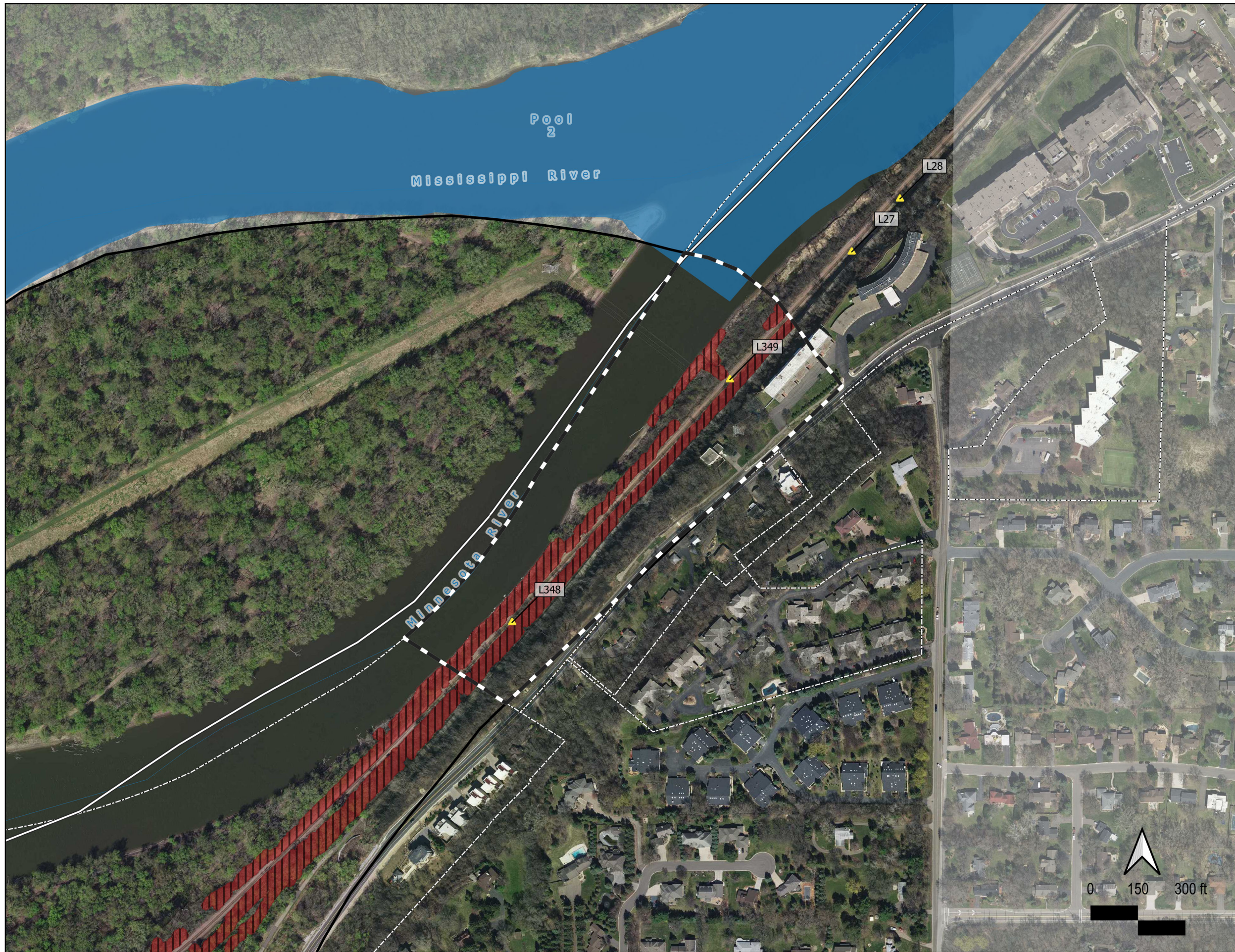
- 2008 Gully Inventory Waypoints
  - Inside LMRWD
  - Outside LMRWD Boundary
  - ✘ Non-Applicable Points
  - Outside Lilydale
  - ◆ MnDNR Spring Inventory
  - ◆ Calcareous Fens
- Public Waters
- Public Waterbodies
- LMRWD Overlay Districts
  - High Value Resource Area Overlay District
  - Steep Slopes Overlay District [SSOD]
- Political Boundaries
  - Lilydale
  - LMRWD Boundary
  - Cities, Townships, Unincorporated Areas
  - County Boundaries

**LMRWD Watershed Location Map**





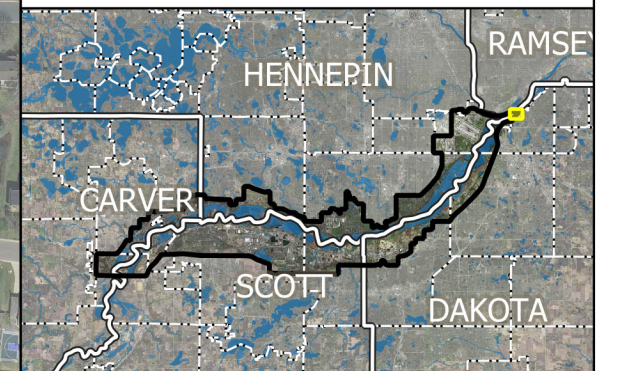
**Figure 114:  
Lilydale 2020 Survey  
Locations**



**LEGEND**

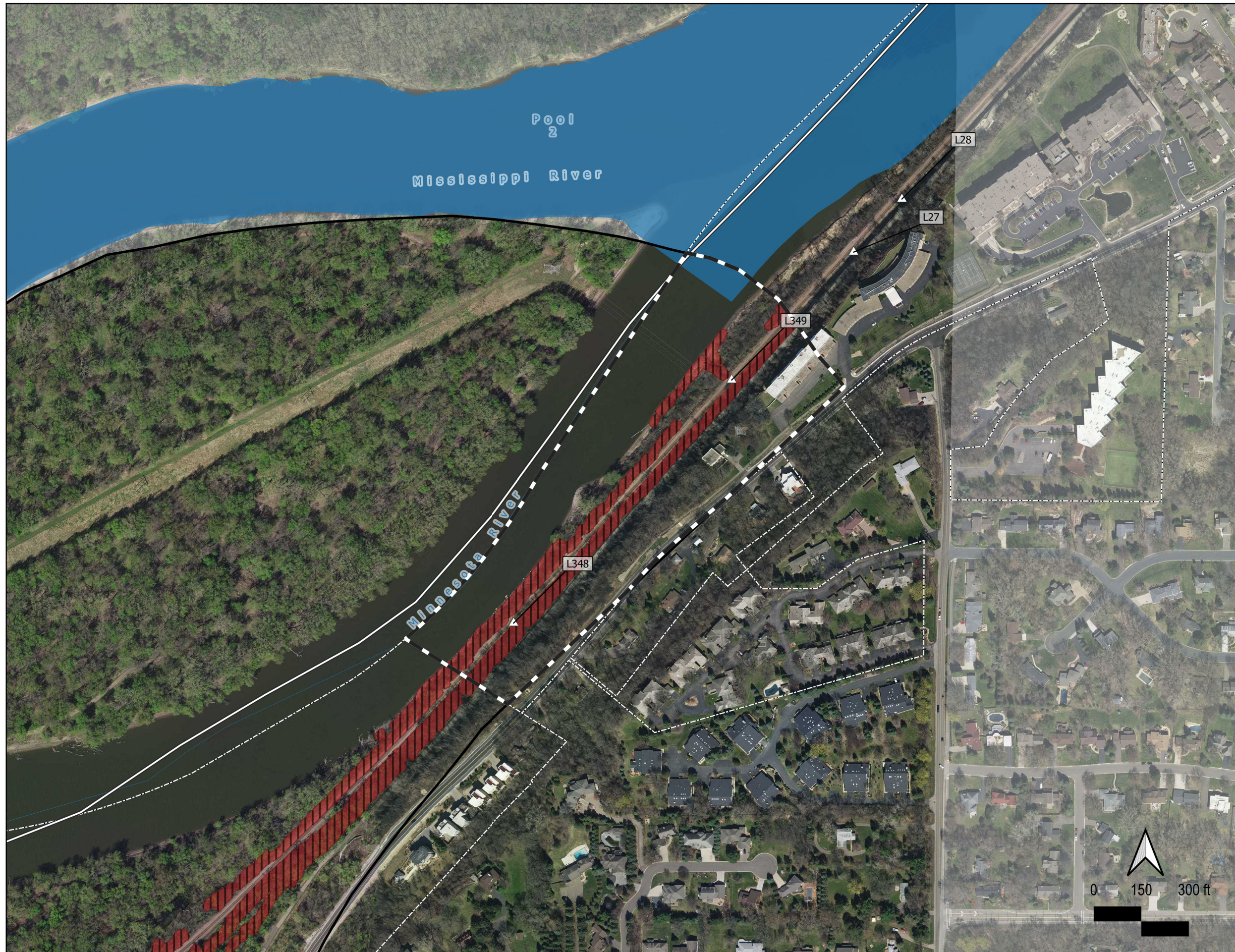
- ▲ 2020 Pipe Outfall Surveys
- ◆ 2020 Combination Surveys
- 2020 Gully Surveys
- ⊗ 2020 Inaccessible Waypoints
- ⊗ 2020 Non-Applicable Waypoints
- ◆ MnDNR Spring Inventory
- ◆ Calcareous Fens
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**LMRWD Watershed Location Map**





**Figure 115:  
Lilydale 2020 Pipe  
Outfall Conditions**



**LEGEND**

- 2020 Pipe Outfalls
- ▲ Needs Immediate Attention
  - ▲ Potential/Future Repair Needed
  - △ Good Condition/No Repair Needed
  - ◆ MnDNR Spring Inventory
  - ◇ Calcareous Fens
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  - Public Waterbodies
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- High Value Resource Area Overlay District
  - Steep Slopes Overlay District [SSOD]
- Political Boundaries
- ▭ Lilydale
  - ▭ LMRWD Boundary
  - ▭ Cities, Townships, Unincorporated Areas
  - ▭ County Boundaries

**LMRWD Watershed Location Map**

