LEGEND

Qal/Qfg/Qfs  Upper Sand and Gravel (Aquifer)
Qmw        Mass Wasting Deposits (Aquitard)
Qgl/TI     Glacial and Latah Clay (Aquitards)
Tw/Tgr     Basalt (Aquifer)
B          Crystalline Basement  
(Aquifer and Aquitard)

Groundwater Flow
Spring
Water Table

WEST

~ 1 Mile

EAST

Reference: Adapted from Boese & Buchanan, 1996.
LEGEND

Qal/Qfg/Qfs  Upper Sand and Gravel (Aquifer)
Qmw        Mass Wasting Deposits (Aquitard)
Qgl/TI     Glacial and Lateh Clay (Aquitards)
Tw/Tgr     Basalt (Aquifer)
B          Crystalline Basement
           (Minor Aquifer and Aquitard)

GROUNDWATER FLOW

GROUNDWATER FLOW OUT OF SECTION

SPOKANE RIVER

SPRING

WATER TABLE

Note: This schematic illustrates a losing reach of the Spokane River. The Spokane River has both losing and gaining reaches within WRIA 57.
**FIGURE 5.12:**
Barker Road North Well
(Barker North)
Spokane Co. / Level 1 Assess / WA

**Data Source:** Spokane County
**Date Type:** Daily averages from transducer data
**Station Name:** Barker Road North, Barker North
**Station ID:** 5507H01

Spokane River Flow
Spokane River nr Post Falls (cfs)

Groundwater Elevation (USGS NGVD29 ft amsl)

[Graph of Groundwater Elevation and Spokane River Flow from 1950 to 2000]
FIGURE 5.13: Mayfair Well

Data Source: Ecology
Date Type: Daily Averages
Station Name: Mayfair Well, Whitworth Water District Test Well
Station ID: 6308F02
Note: completed in the upper sands & gravels of N Hillyard Trough

Spokane Co / Level 1 Assess / WA

Groundwater Elevation (USGS NGVD29 ft amsl)
Spokane River nr Post Falls (cfs)
FIGURE 5.14:
Dakota Well

Data Source: Ecology
Date Type: Daily Averages
Station Name: Dakota Well, Spokane County Water District #3
Station ID: 6308B04
Note: completed in the lower sands & gravels of N Hillyard Trough

Spokane Co / Level 1 Assess / WA
FIGURE 5.15:
Chatteroy Observation Well
Spokane Co / Level 1 Assess / WA
FIGURE 6.3a:
Little Spokane River Temperature
Spokane County
Watershed Assessment
013-1372, 11/09/01, LSR-time.xls

Legend
- LSR-3
- RM 47.0
- RM 37.5
- RM 31.8
- RM 23.1
- RM 19.2
- RM 13.0
- RM 10.3
- RM 3.9
- RM 1.1

Notes: LSR 1-6 data from POCD-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.3b:
Little Spokane River Temperature, Dry Season

Spokane County
Watershed Assessment

013-1372, 11/09/01, LSR-space.xls

Legend

- - Oct-12-98  - - Nov-02-98
- - Jul-12-99  - - Aug-09-99
- - Sep-13-99

Notes: Lines indicate approximate location where tributary joins Little Spokane River
LSR 1-6 data from POCD-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.3c:
Little Spokane River Temperature, Wet Season

Spokane County
Watershed Assessment
013-1372, 11/09/01, LSR-space.xls

Legend
- - - Dec-07-98
- - - Jan-11-99
- - - Feb-08-99
- - - Mar-08-99
- - - Apr-05-99
- - - May-03-99
- - - Jun-07-99

Notes: Lines indicate approximate location where tributary joins Little Spokane River
LSR 1-6 data from POCD-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.4b:
Little Spokane River Dissolved Oxygen, Wet Season
Spokane County
Watershed Assessment
013-1372, 11/09/01, DO.xls
FIGURE 6.4c:
Little Spokane River Dissolved Oxygen, Dry Season
Spokane County
Watershed Assessment
013-1372, 11/09/01, DO.xls

Legend
- - 11/2/98
- - 7/12/99
- - 8/9/99
- - 9/13/99

Notes: Lines indicate approximate location where tributary joins Little Spokane River
LSR 1-6 data from POCD- SCCD- DOE- 2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.5a:
Little Spokane River Fecal Coliform

Spokane County
Watershed Assessment

Legend
- LSR-3
- RM 47.0
- RM 37.5
- RM 31.8
- RM 23.1
- RM 19.2
- RM 13.0
- RM 10.3
- RM 3.9
- RM 1.1

Notes: LSR 1-6 data from POCD-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.5b:
Little Spokane River Fecal Coliform, Dry Season
Spokane County
Watershed Assessment
013-1372, 11/09/01, LSR- space.xls

Legend
- Oct-12-98
- Nov-02-98
- Jul-12-99
- Aug-09-99
- Sep-13-99

Notes: Lines indicate approximate location where tributary joins Little Spokane River
LSR 1-6 data from POC- SCCD- DOE- 2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.5c:
Little Spokane River Fecal Coliform, Wet Season

Spokane County
Watershed Assessment
013-1372, 11/09/01, LSR- space.xls

Legend


Notes: Lines indicate approximate location where tributary joins Little Spokane River
LSR 1-6 data from POCD- SCCD- DOE- 2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.5d:
Little Spokane River Fecal Coliform-Flow Correlation
Spokane County Watershed Assessment
013-1372. 11/09/01, LSR cont v flow.xls

Legend
- LSR-3
- RM 47.0
- RM 37.5
- Linear (LSR-3)
- Linear (RM 47.0)
- Linear (RM 37.5)

Notes: LSR 1-6 data from POCD-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.6a:
Little Spokane River pH
Spokane County
Watershed Assessment

Legend
- LSR-3
- RM 47.0
- RM 37.5
- RM 31.8
- RM 23.1
- RM 19.2
- RM 13.0
- RM 10.3
- RM 3.9
- RM 1.1

Notes: LSR 1-6 data from POCO-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 8.2 and Figure 6.1

013-1372, 11/09/01, LSR-time.xls
FIGURE 6.6b:
Little Spokane River, pH-Flow Correlation
Spokane County
Watershed Assessment

Notes: LSR 1-6 data from POCD-SCCD-DOE-2000
55B070, 55B075, 55B082, 55B200 data from DOE monitoring
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
Figure 6.6c: Little Spokane River pH-Flow Correlation

Legend:
- RM 31.8
- RM 19.2
- RM 13.0
- RM 23.1
- Linear (RM 31.8)
- Linear (RM 19.2)
- Linear (RM 13.0)
- Linear (RM 23.1)

Notes:
- LSR 1-6 data from POCD, SCCD, DOE, 2000
- 55B070, 55B075, 55B082, 55B200 data from DOE monitoring
- Station abbreviations and locations can be found in Table 6.2 and Figure 6.1

Spokane County
Watershed Assessment
013-1372, 11/09/01, LSR cont v flow.xls

Golder Associates
FIGURE 6.7:
Dragoon Creek Dissolved Oxygen
Spokane County
Watershed Assessment

Legend
- DR-1  - DR-2  - DR-5

Notes: Dragoon joins Little Spokane after DR5
DR2 data from POCID-SCCD-DOE-2000
DR1 and DR5 data from WQMP
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 6.8: Dragoon Creek Fecal Coliform
Spokane County
Watershed Assessment
013-1372, 11/09/01, dragoon-space and time.xls

Legend

- DR-1
- DR-2
- DR-5

Notes: Data plotted on a Log scale so entire variation in values can be seen.
Dragoon joins Little Spokane after DR5
DR2 data from POCD-SCCD-DOE-2000
DR1 and DR5 data from WQMP
Station abbreviations and locations can be found in Table 6.2 and Figure 6.1.
FIGURE 6.9a:
Spokane River Hardness-Flow Correlation

Spokane County
Watershed Assessment
013-1372, 11/09/01, spokane data.xls

Legend
- total hardness
- calcium hardness
- Log Trendline (calcium hardness)
- Log Trendline (total hardness)

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1

Data Sources:
- Pelletier and Merrill, 1998
- USGS
- City of Spokane, 2000
- Zheng, 1995
- Walkley, 2000
- Spokane County, 1994, 1996, 1997
FIGURE 6.9b:
Dry Season - Spokane River Total Hardness by River Mile

Spokane County
Watershed Assessment
013-1372, 11/09/01, spokane data.xls

Legend
- Jul-12-96
- Sep-09-97
- Sep-16-97
- Sep-15-98
- Nov-03-98
- Jul-15-99
- Sep-09-99
- Nov-15-99

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1.

Data Sources:
- Pelletier and Merrill, 1998
- USGS
- City of Spokane, 2000
- Zheng, 1995
- Walkley, 2000
- Spokane County, 1994, 1996, 1997
FIGURE 6.9c:
Wet Season - Spokane River Total Hardness by River Mile

Spokane County
Watershed Assessment
013-1372, 11/09/01, spokane data.xls

Legend

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Date</th>
</tr>
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</tr>
<tr>
<td>□-□</td>
<td>May-01-99</td>
</tr>
<tr>
<td>■-■</td>
<td>Jun-01-99</td>
</tr>
<tr>
<td>□-□</td>
<td>Jun-17-99</td>
</tr>
</tbody>
</table>

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1.

Data Sources:
- Pelletier and Merrill, 1998
- City of Spokane, 2000
- Walkley, 2000
- USGS
- Zheng, 1995
- Spokane County, 1994, 1996, 1997
FIGURE 6.10a:
Spokane River, Dissolved Cadmium Concentrations by River Mile
Spokane County
Watershed Assessment
013-1372, 11/08/01, spokane data.xls
FIGURE 6.10b:
Spokane River, Dissolved Zinc Concentrations by River Mile

Legend
- May-12-97
- May-01-99
- Nov-16-99
- Apr-05-00
- Sep-15-98
- Jun-01-99
- Nov-01-99
- Jan-06-00
- Feb-17-00
- Sep-09-99
- Springs near Sullivan
- WallD Border
- Post Falls Dam
- Monroe Street Dam
- Upper Falls Dam
- Upriver Station Control Works

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1

Data Sources:
Pelletier and Merril, 1998
USGS
City of Spokane, 2000
Zheng, 1995
Walkley, 2000
Spokane County, 1994, 1996, 1997

013-1372, 11/09/01, spokane data.xls
FIGURE 6.10c:
Spokane River, Dissolved Lead Concentrations by River Mile

Spokane County
Watershed Assessment

Legend
- Sep-15-98
- Jun-01-99
- May-12-97
- May-01-99

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1

Data Sources:
- Pelletier and Merrill, 1998
- Zheng, 1995
- City of Spokane, 2000
- Spokane County, 1994, 1996, 1997
- USGS
- Walkley, 2000

013-1372, 11/09/01, spokane data.xls
FIGURE 6.10d:
Spokane River Cadmium-Flow Correlation

Spokane County
Watershed Assessment

Legend
- - - Linear (Total Cadmium)
- - - Linear (Dissolved Cadmium)

- Total Cadmium
- Dissolved Cadmium

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
Data Sources: Pelletier and Merrill, 1998
City of Spokane, 2000
Walkley, 2000
USGS
Zheng, 1995
Spokane County, 1994, 1996, 1997
FIGURE 6.10f:
Spokane River Lead-Flow Correlation

Spokane County
Watershed Assessment
013-1372, 11/09/01, spokane data.xls
FIGURE 6.11:
Spokane River Dissolved Oxygen

Spokane County
Watershed Assessment

Legend
- RM 75.1  - RM 76.8  - RM 80.0
- RM 80.5  - RM 84.2  - RM 92.7

Note: Station abbreviations and locations can be found in Table 6.2 and Figure 6.1
FIGURE 7.15:
Per-Capita Daily Domestic Water Use
Spokane County
Watershed Inventory Assessment
013-1372, 7.13 and 7.15.xls, 10/15/01
Maximum: ~2,400 gpcpd
Influenced by agricultural irrigation service.

FIGURE 7.18:
Average Monthly Per Capita Water Use

Average annual water use (1999) = 318 gpcpd (excluding CID data).
Per capita use is total water use including retail, commercial, industrial, etc.
Residential per capita use will be smaller.