Retrospective and Conceptual Model Reports--update

SVRP TAC Meeting
WDOE ERO Spokane, WA

January 27, 2006

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http://wa.water.usgs.gov/

Prepared in cooperation with the Idaho Department of Water Resources and the Washington Department of Ecology

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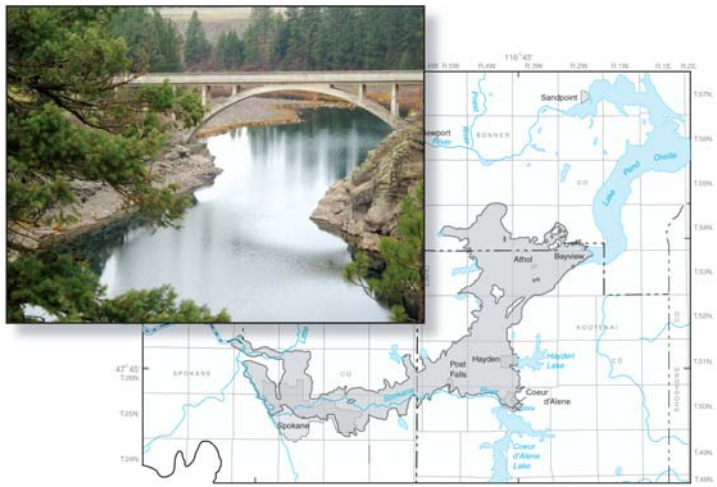
Compilation of Geologic, Hydrologic, and Ground-Water Flow Modeling Information for the Spokane Valley—Rathdrum Prairie Aquifer, Spokane County, Washington, and Bonner and Kootenai Counties, Idaho



Scientific Investigations Report 2005–5227

U.S. Department of the Interior
U.S. Geological Survey

Retrospective report
November 2005

Acknowledgments

TAC members; water purveyors; city, county, and state agencies; consulting firms; local colleges and universities; private landowners; and co-authors Rod Caldwell and James Bartolino

The report is available at URL
http://pubs.water.usgs.gov/sir20055227/

Report content

1. Geologic info: pre-Tertiary, Tertiary, and Quaternary geologic history and surface geophysical investigations
2. Hydrologic info: SVRP aquifer extent, hydrologic properties, ground-water and lake levels, water-budget components, and ground-water and surface-water interactions
3. Modeling info: Bolke and Vaccaro (1981), CH2M HILL (1998), Buchanan (2000), and Golder (2004)
4. Data needs: geometry of the aquifer, inflows and outflows, river-aquifer exchanges, continued/expanded ground-water and stream-flow measurements

Conceptual model report (proposed content)

Updated hydrogeologic framework

Updated water-budget components

Draft report October 2006, Kahle and Bartolino

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Hydrogeologic framework

- Use logs from 600 wells to construct hydrogeologic sections
- Use well data and existing geophysical transects to estimate base of aquifer
- Construct map(s) of significant fine-grained layers
- Integrate newly collected borehole and geophysical data

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