

Policies and Procedures Regarding Water-Well Records Access

Illinois State Water Survey

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Background

The Illinois State Water Survey (ISWS) has a long history of conducting applied scientific research and providing products and service to the citizens of Illinois and the nation. Over time, the mission has changed in response to evolving needs and opportunities. It is anticipated that this flexibility and responsiveness will continue to be a hallmark of the ISWS.

Illinois legislation mandates the ISWS “to act as the central repository and research coordinator for the State in matters related to water and atmospheric resources” (ILCS, pt 801/1-25, par 16). Executing this mandate means that the ISWS will store data on Illinois water and atmospheric resources.

The rapid advance of technology, particularly the emergence of the Internet as a communications medium, provides the opportunity for the dissemination of water and atmospheric resources data and information to be made available within the public domain. Many data sets and products result from ISWS research and data collection. The ISWS is making strides in making many of its data sets and reports available from the ISWS Web page. However, additional resources are needed to make all large data sets digitally accessible.

This is true of water-well records archived by the ISWS. The Illinois Groundwater Protection Act of 1987 requires the Department of Natural Resources to “develop a coordinated groundwater data collection and automation program. The collected and automated data shall include but need not be limited to groundwater monitoring results, well logs, pollution source permits and water quality assessments. The Department shall act as the repository for such data and shall automate this data in a manner that is accessible and usable by all State agencies” (415 ILCS 55/7). However, the Legislature did not authorize funding to implement the program, which remains an unfunded mandate. Further, since 1991, the ISWS state headcount has dropped from more than 90 to approximately 60 full-time equivalent employees. As a consequence, ISWS programs have been cut, services are more difficult to maintain, and State funds are not available to support all needed positions, including well-record information services, Webmaster, geographical information system specialist, editor, and graphics specialist.

Some progress has been made using existing resources. Three full-time equivalent State-funded positions contribute about two-thirds of the resources needed to operate the well-record program. The other third of the resources comes from a revolving account that is funded on a cost-recovery basis from charges for records-access services. The leveraging of limited State funds to more fully support the comprehensive natural-resources data needs of Illinois is a basic operating approach for the Scientific Surveys.

ISWS Water-Well Databases

As part of the Survey's mandate, the ISWS has been collecting, archiving, and disseminating records of water wells drilled in Illinois since the start of the 20th Century, long before the 1987 Groundwater Protection Act. ISWS files and databases contain records for more than 300,000 water wells. Most of the original data comprising these records, the water-well construction log, is generated by the water-well contractor (the driller). Under the Local Health Protection Grant Rules, the private-well owner must obtain a well-construction permit from the local health department prior to drilling the well. Upon completion of the well, the driller must submit the well-construction log to the local public health department. The local health department is then required to submit copies of all water-well construction permits and construction logs to the ISWS (77 ILL ADMIN CODE 615.320(b), par 7 & 12). Permitting fees for water-well construction are assessed by the local health department. No funds from those permitting fees are made available to the ISWS for data entry, processing, archiving, distribution, or interpretation. Once the well permit and construction log have been processed through the ISWS, a copy of the construction log is sent to the Illinois State Geological Survey (ISGS), and the original log is filed. The ISGS well-log database contains geologic information that the ISWS PWDB does not; however, the ISGS well-log database must be accessed through the ISGS and is not on-line to the public. The ISWS is not required to archive the well construction permit.

The ISWS annually processes approximately 12,000 water-well records and more than 2,000 requests for water-well information. The water-well data are used extensively by a wide variety of users, including individual homeowners, industries, lawyers, government agencies, drillers, scientists, students, teachers, and engineering consultants. The records provide valuable data regarding geology, groundwater levels, and well yields. Such data are used to determine locations and depths of wells near a site of concern, depth to water and aquifers, type of aquifers beneath a site, as well as contamination potential of underlying aquifers. Engineering consultants, in particular, are required by the Illinois Environmental Protection Agency to report all wells within proximity to leaking underground storage tanks. Interpretation of the data contained within these records is extremely important to assist decision-makers regarding the management of groundwater resources.

In addition to the ISWS paper archives, two principal computer databases have been created to contain elements of the data contained on the original paper records. Private-Well Database (PWDB) was designed to contain "header" data for private, domestic, small-capacity wells. The Public-Industrial-Commercial Survey (PICS) database contains information on large-capacity (≥ 70 gpm) wells, including all community (municipal) water wells. The PICS database is linked to another database containing annual water withdrawal data collected through the Illinois Water-Inventory Program (IWIP), which was originally funded principally through a cooperative agreement with the U.S. Geological Survey (USGS). The USGS no longer financially supports the ISWS for IWIP data collection or database maintenance. Instead, IWIP is also partially funded by State resources which must be leveraged to obtain additional external support for the program.

The PWDB contains a far larger number of records (~300,000 wells) than the PICS database (~10,000 wells). The PWDB contains information that include well location (by county, tier, range, section, and 10-acre plot), owner name, driller name, date drilled, depth, record type (e.g., water-well construction report, chemical analysis report, and water-well inventory report), well use (e.g., domestic, monitoring, irrigation, noncommunity, or community), well type (e.g., dug, bored, drilled, or driven), aquifer type (e.g., sand and gravel, bedrock), reported static-water level, pumping-water level, and pumping rate. New wells entered into the database since 1997 contain an ISGS identification number.

The PWDB is maintained on the ISWS' SQL server, which was converted from a UNIX server in 1999. The PICS database is still maintained on the UNIX server, and plans are underway to migrate the database to the SQL server. The goal is to have this conversion completed in FY02 (i.e., by July 2002). Until the PICS database is moved to the SQL server, Web access to the PICS database and IWIP database will not be provided.

ISWS Water-Well Records Access: Policies and Procedures

The following statements outline policies and procedures regarding public access to the ISWS water-well records. These policies and procedures include notification to users of standards and charges effective August 1, 2001.

1. **Access to original records.** All original water-well records can be accessed free of charge by visiting the ISWS Champaign office during regular working hours.
2. **Cost recovery.** Costs incurred from the allocation of state General Revenue Funds (GRF) will not be passed on to the user. Costs of non-GRF-supported activities related to document processing, data entry, database maintenance, computer database printouts, and identification and creation of paper copies of original well records will be passed on to all users on a cost-recovery basis. There will be no charge for requests from individual well owners or requests related to Intergovernmental Cooperative Agreement.
3. **Information requests.** Requests for well-records information should be directed to Susie Dodd-Casey at the ISWS by mail (2204 Griffith Drive, Champaign, IL 61820), phone (217-333-9043), e-mail (sdodd@sws.uiuc.edu), or fax (217-244-0777). Descriptions of the area of interest should be by legal description (1/4-, 1/4-, 1/4-section, township, range, county). Requests for policy information should be directed to Chief Derek Winstanley at 217-244-5459 or dwinstan@uiuc.edu.
4. **Requests for database printouts.** For a computer printout of the PWDB and PICS records, a request can be submitted to the ISWS (see number 3 above). The ISWS can search the PWDB for multiple locations, thereby providing a more efficient search than through free internet access. All requests for computer printouts of the PWDB well-record information and for paper copies of the

original well records will incur a charge. Charges for PICS access and printout will be the same as for PWDB access and printout (\$35 query fee plus \$0.10 per page plus \$5 shipping and handling). Because of the proprietary nature of some PICS data, and because the PICS database has not yet been fully updated to a publicly accessible format, PICS database searches must be conducted by the ISWS. As with the PWDB, PICS requests are limited to four township/range locations per request. To control single queries for whole counties or the whole state, each query is limited to four township/range locations (e.g., a query that covers ten separate township/range descriptions will be charged as for three queries).

5. **Requests for copies of original records.** For paper copies of original records, the charge for identifying and pulling the requested records from the files will be on a sliding scale depending on the number of records to be copied: 1 - 20 records (\$10); 21 - 60 records (\$25); and more than 60 records (\$45). There will also be a \$0.10 per page copying charge plus \$5 for shipping and handling. For requests for locations containing greater than 20 records, all records will be copied, and the requestor will be charged according to the sliding scale (i.e., the ISWS will *not* be responsible for identifying which records to copy just to keep a request below 20 records).
6. **First-come, first-served, and need basis.** Responses to requests will be handled on a first-come, first-served, and need basis. There will be no charge for a request that can be handled quickly verbally on the telephone (e.g., a few selected well records read aloud over the phone).
7. **Web access.** Starting on July 1, 2001, all users will have free Web access to the PWDB (<http://www.sws.uiuc.edu/data/gwdb>). Access will be limited to one section (1 square mile) per request. For liability reasons, the name of the well owner will not be provided through PWDB access on the Web. The PWDB Web-page will be updated weekly. The following list contains the database fields that will be provided on the Web:

PWDB Fields Provided on ISWS Web-Page

wid - ISWS well-identification number

sgs_num - ISGS geologic-record-database-identification number

twn - Township or tier

rng - Range

sec - Section

plot - ISWS 10-acre plot designation within the Section

driller - Drilling company that drilled the well

date_drilled - Date when well was drilled

depth - Total well depth

record_type - Paper record type used to generate the database record (e.g., construction report, chemical analysis report, or water-well inventory report)

well_use - Water-supply use (e.g., domestic, monitoring, irrigation, noncommunity, or community)

well_type - Well-construction type (e.g., dug, bored, drilled, or driven)
aq_type - Aquifer-code identifier (e.g., sand and gravel or bedrock)
stat_level - Nonpumping or static-water level measured when the well was drilled
pump_level - Pumping-water level measured when the well was drilled
pump_gpm - Pumping rate when pumping-water level was measured
pumping_hrs - Length of time pump was on when pumping-water level was measured

8. **Delinquency of payment.** Users of the water well records services will be invoiced for payment by mail when the request is filled. Nonpayment of the invoice within 60 days after issuance will result in loss of service until payment is received.

9. **Charging policy review.** The following table lists charges for computer printouts, photocopying, and shipping and handling. These charges may be adjusted to maintain an appropriate balance, neither an undue surplus or deficit. The charging policy will be received on a periodic basis.

**ISWS WATER-WELL DATABASES
CHARGING POLICY (Effective August 1, 2001)**

Description of Service

Charge

Paper Media

Original Paper Document Identification & Photocopying	
1 - 20 Records	\$10 fee + \$0.10 per page
21 - 60 Records	\$25 fee + \$0.10 per page
> 60 Records	\$45 fee + \$0.10 per page
Database (PWDB, PICS, and IWIP) Search & Printout	\$35 fee + \$0.10 per page*

Electronic Media

Policies, procedures, and charges for preparation of digital files (e.g., floppy disk or CD-ROM) will be developed, but are not available at this time.

Shipping & Handling (all mailings) \$5.00

Note:

*The charges apply to the Private-Well Database (PWDB), the Public-Industrial-Commercial Survey (PICS) database, and the Illinois Water-Inventory Program (IWIP).

Requesting Entity	Charge for Services		Annual Requests %
	<i>Yes</i>	<i>No</i>	
Engineer/Consultant	X		65
Driller*	X		14
Federal/State/Local Gov. Agencies**	X		10
Individual Well Owner***		X	10
Industry	X		1
Students/Teachers	X		<1
Attorney	X		<1

Note:

- *For copying/faxing more than six well records
- **Except under Intergovernmental Cooperative Agreement.
- ***For copy of individual owner's well record.