

Upgrade Well Log Tracking System (WELTS)**FY2013 Request: \$112,000****Reference No: 53966****AP/AL:** Appropriation**Project Type:** Energy**Category:** Natural Resources**Location:** Statewide**House District:** Statewide (HD 1-40)**Impact House District:** Statewide (HD 1-40)**Contact:** Jean Davis**Estimated Project Dates:** 07/01/2012 - 06/30/2017 **Contact Phone:** (907)465-2422**Brief Summary and Statement of Need:**

The purpose of the Well Log Tracking System (WELTS) Online system is to provide a stable web based environment for the publication and distribution of groundwater data as mandated in statutes. The current online database program is a valuable resource to the stakeholders, having an average use rate of 53+ hits per day (19,500 per year). The original program no longer meets the need of agencies or the public. With enhancements, it could greatly expand the capabilities to make this data available in a more reliable and efficient manner. The data available in this database is necessary to populate groundwater models like the new Mat-Su Groundwater Model.

Funding:	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>Total</u>
Gen Fund	\$112,000						\$112,000
Total:	\$112,000	\$0	\$0	\$0	\$0	\$0	\$112,000

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	25,000	0
One-Time Startup:	0	
Totals:	25,000	0

Additional Information / Prior Funding History:**Project Description/Justification:**

The current Wells Log Tracking System (WELTS) program was developed over 15 years ago, to allow access by the public to the then 15,000 water well logs collected by Department of Natural Resources (DNR), Department of Environmental Conservation (DEC) and the United States Geological Survey (USGS). This system has not been upgraded to meet the needs of these agencies, and the public. The system is currently runs on a Windows based server in Division of Mining Land and Water (MLW). The system, due to its age, is subject to crashing on a daily basis and is difficult to bring back on line. The entry of new well log data is a manual process that is cumbersome at best, and currently only one person in DNR has the knowledge to operate this entry system. This person will retire within the next year. Currently the WELTS system has in excess of 33,000 well logs, and is over taxing the capability of the storage system, which was not built to handle the number of online searches it currently receives (19,500 per year). The goal of this project is to; 1) Place the WELTS database into a stable long term configuration, meeting current state/DNR standards and to fulfill the mandate to gather and distribute water resource data; 2) Design and build an enhanced online application, based on the existing WELTS database, which would reside on the DNR enterprise Oracle database, and remove the current version on the Windows server, and to

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provide the public with enhanced data recovery tools; 3) Make WELTS easier to access and use, with faster response times, and provide new features to the stakeholders, including the ability to allow for water well drillers to upload new water well logs into the system. These enhanced features would further enhance well drillers compliance with DNR statutes (currently we receive only 20 percent of all logs for wells drilled within the state each year; 4) Tie the WELTS system into the other DNR GIS and mapping programs to allow for new mapping capabilities, which do not currently exist.

Why is this Project Needed Now?:

There is no other method of obtaining water well log information available, other than the manual search of thousands of paper files stored at DNR, DEC, USGS and water well drillers offices.

There is a greater reliance on automated data distribution within the section. In prior years, data transfer would have required the intervention of several staff members. The current system is limited by cumbersome data entry procedures and limited search capabilities. Enhancements to the system would reduce the time required for data entry and validation procedures. The enhanced WELTS system would also eliminate much of the time spent by staff on performing the more complex searches.

An upgraded WELTS database system will result in increased interaction with the well drilling community which in turn will lead to an increased number of well logs being received by DNR for WELTS. The upgrade will allow drillers to interact via direct entry of water well logs. An indirect benefit would be enhanced standardization of the well logs themselves.

Technical staff will still be required because well logs can be complex in nature and may be delivered in many different formats. The well log may also contain extensive hydrologic analyses that are not presentable as simple .pdf images but are none the less vital to the understanding and management of the state's water resources. An enhanced WELTS program should contain the ability to refer to additional electronic data, such as the results of aquifer testing, which would otherwise be lost to the end user.

Specific Spending Detail:

LINE ITEM	DOLLAR AMOUNT	DESCRIPTION
Commodities	\$ 112,000	

State Match Required:

- NO
 YES

Project Support:

The current WELTS system is used by State and federal agencies, water well drillers, and private sector consultants working on resource development projects throughout the State. The WELTS system receives an average of 53+ users per day or 19,500 per year, a user rate that is growing annually. There is no other method of obtaining water well log information available.

Project Opposition:

None