



# Newsletter

## Environmental Connection

July 2008

### Contents

DEQ has its Designs on a New 'Greener' Building  
DEQ Moves to 4-day Work Week to Benefit Employees and the Environment  
Huntsman Praises PrePass: Trucking Technology Helps Clear the Air  
Protecting the Great Salt Lake: Panel Paves Pathway to New Pollution Standard  
State Sets Greenhouse Gas Emissions Goal

Sponsored by the Utah Department of Environmental Quality

Donna Kemp Spangler, Editor

---

## DEQ has its Designs on a New 'Greener' Building

The Department of Environmental Quality is designing a new building for its next-generation workforce that is a shade greener than the typical box-office space.

“This will meet or exceed High-Performance Building Standards,” said Steve Higley, director of Support Services for DEQ.

Higley is a member of a hand-picked committee of DEQ employees currently reviewing the architectural designs for construction of a multi-agency building that will house DEQ and the Department of Human Services to be built in the existing vacant lot west of the Tax Commission.

The 250,000 square-foot building is expected to break ground this summer, with completion anticipated 16 to 18 months later, said Matthias Mueller, program director of facilities construction management for the Department of Facilities and Construction Management (DFCM).

Human Services will be occupying the building first because the lease on their current facility at 150 West North Temple expires in the fall of 2009. Part of the \$40 million cost of the first phase of the project may allow some of the DEQ Divisions to move into it. The next phase, finishing the DEQ part of the building, has yet to be funded but the funding is expected to be evaluated during the 2010 legislative session.

Meanwhile, the DFCM, along with the DEQ building committee and Human Services, is meeting with potential contractors in work sessions to review their proposals on the design-build facility.

A contractor will be selected by the end of July. The DEQ Building Committee is confident that all three of the design-build teams vying for the project could do the job well.

“I’m very impressed that all of the potential contractors are creative and innovative in their approach to constructing something that isn’t a typical government building,” noted Ryan Walker, Information Technology (IT) director for DEQ and building committee member.

Bill Sinclair, deputy director of DEQ, couldn’t agree more.

“It will be a difficult process selecting a contractor,” Sinclair said. “That’s why I want employees to provide suggestions on what they want in the building to help DEQ function well.”

A suggestion form, created on DEQ’s InnerWeb, has prompted dozens of employee responses that the building committee is considering.

Of importance to both Human Services and DEQ is a well-lighted spacious building that creates a comfortable environment for employees and visitors, with shared common areas and the use of ‘green’ building design.

“It’s important that we think beyond the typical state building,” said John Hultquist, section manager for the Division of Radiation Control and building committee member. “The new generation likes open space, not so much closed cubicles.”

More information on the multi-purpose building can be found at: [www.dfcu.utah.gov](http://www.dfcu.utah.gov).

Click on DEQ’s InnerWeb to provide the committee comments. Members of the committee are also listed.

---

## DEQ Moves to 4-day Work Week to Benefit Employees and the Environment

Department of Environmental Quality (DEQ) employees will be adjusting their work schedules to accommodate a four, 10-hour workweek as part of Governor Huntsman’s proposal to save energy and reduce driving costs that also benefits Utah’s air quality.

Beginning August 4, DEQ and other executive branch state agencies will be open from 7 a.m. until 6 p.m. in order to extend services to the working public. The adjustment will be in effect until September 2009, at which time it will be evaluated and determined whether to continue the adjusted hours.

“The initiative is called ‘Working 4 Utah’ designed to address four main areas – energy, Environment, Extended service and Employees,” explained Rick Spratt, executive director of DEQ, in an email to employees. “We look forward to implementing this new initiative and we ask for your support as we move forward.”

Governor Jon Huntsman made the announcement during his monthly news conference at KUED on June 26. The move was based on an employee survey and analysis of the six buildings – DEQ Buildings 1 and 2, Human Services, Natural Resources, State Office building and Agriculture and Food.



The projected annual energy savings from closing the six buildings one day a week would amount to \$123,200 to taxpayers and a reduction of 653 million BTUs (British Thermal Units, a small unit of heat) in energy use – the equivalent of removing over 600 vehicles from the road for one year.

For employees from the six buildings it means an annual savings of \$312,971 in fuel costs.

Just the DEQ Buildings 1 and 2, the adjustment in hours means a total annual reduction of:

- 3,049 million BTUs of energy;
- 388 metric tons of carbon dioxide; and
- 1,963 pounds of nitrogen dioxide.

“This includes building and employee commutes,” said Glade Sowards, energy coordinator for DEQ. “The DEQ buildings mean a total savings of \$57,793 for both the state and employees.”

Huntsman is pleased with those kinds of results.

“As we go forward with this initiative, we will conserve energy, save money, improve our air quality, and enhance customer service,” Governor Huntsman said. “We live in a dynamic, ever-changing environment, and it’s crucial that we take a serious look at how we can adapt and maintain our state’s unparalleled quality of life.”

Each agency will be given flexibility on incorporating the new 10-hour shift.

“We have informed DEQ managers of this initiative, and indicated to them to be flexible for the first couple of months to allow for modifying employee schedules,” said Spratt. “All Divisions and Offices will be working on these implementation issues.”

---

## **Huntsman Praises PrePass: Trucking Technology Helps Clear the Air**

Perry, Utah – Governor Jon Huntsman praised truckers for reducing air pollution by utilizing an electronic “PrePass” that tracks the drivers’ safety records without having to stop at weigh stations, preventing engine idling that release pollution into the air.

“This is great for the air quality and the economy,” Huntsman said during a May 30 tour of the Utah Department of Transportation’s (UDOT) Perry Port of Entry weigh station where he saw firsthand how the PrePass system works.

Truckers can bypass the weigh stations at highway speeds because of a transponder that electronically identifies the vehicle to a computer that checks state-required safety and registration credentials. Truckers in good standing who register for the PrePass system are given the green light at the weigh stations, saving them time and money while avoiding engine idling that release tailpipe emissions in the air.

The six PrePass sites in Utah have already reduced overall air pollution by 2,000 metric tons in the past two years – the equivalent of taking about 400 cars a year off the road – and will reduce emissions by more than 28,500 metric tons in the next 10 years.

That's a significant achievement given the challenges for many Utah communities to meet the tougher federal ozone standards, noted Cheryl Heying, director of the Division of Air Quality. "We applaud the efforts of public and private groups to come together to help solve environmental problems."

PrePass is the product of a joint effort between state and industry in the form of a non-profit partnership HELP (Heavy Vehicle Electronic License Plate) that developed the system now in use in 29 states.

UDOT is pleased to be one of them.

"I appreciate the partnership with private industry," said John Njord, executive director of UDOT. "This is a classic example of government coming together with private industry."

Truckers like it because it saves them time and money. Nearly 425,000 trucks have enrolled in PrePass, saving carriers more than \$9 million in operational costs, including 920,000 gallons of fuel since UDOT deployed the system at weigh stations.

"It's made a tremendous difference in efficiency in the trucking industry. It saves money, it saves time," Tom Draper, driver for CR England Trucking, told the Governor. "Why didn't someone think of this before?"

Utah sees added benefits in that the Affiliated Computer Services, Inc. based in Sandy serves as the nation's service center for PrePass.

"It's a triple win," said Rick Sprott, executive director of Department of Environmental Quality. "It's a win for air, a win for the trucking industry and a win for the economy."

More information is available at: [www.prepass.com](http://www.prepass.com).



*Cheryl Heying (Director, Utah DAQ), Jon Huntsman Jr. (Utah State Governor), and Rick Sprott (Director, Utah DEQ)*

---

## Protecting the Great Salt Lake: Panel Paves Pathway to New Pollution Standard

Great Salt Lake, Utah – During the spring and fall the Great Salt Lake shoreline is typically covered with nests of eggs ready to hatch, all evidence of the phalaropes, black-necked stilts, avocets and grebes here to feast on a buffet of brine shrimp and flies.

“There are times when millions of birds come in waves,” explains our guide Dave Barnes of the Central Davis Sewer District, which took a small group of Department of Environmental Quality (DEQ) officials and an Associated Press reporter on a birds-eye view of the lake’s fragile ecosystem that DEQ is working to protect.

On this day in late May, surprisingly only an occasional avocet and stilt was seen, and there were but few signs of nesting or bird eggs. This doesn’t completely surprise Theron Miller, an environmental scientist in the Division of Water Quality. The unpredictable nature of the lake is what fascinates many people who visit it.

“When we monitor avocets’ movements and foraging habitats it changes every year,” Miller says, surveying the lake in an air-boat accompanied by DEQ’s Great Salt Lake Coordinator Jodi Gardberg and Associated Press reporter Mike Stark.



*Theron Miller and Jodi Gardberg*

Leland Myers, manager of the Central Davis Sewer District, couldn’t agree more. He and his crew are here often, piloting people in air-boats and a Hover craft. “I always see something different,” says Barnes.



*Leland Meyers (Manager, Central Davis Sewer District) and crew*

For the past four years, Miller and eight other scientists, part of the prestigious Science Panel, have engaged in a \$2.3 million project studying the lake. In particular, they have been testing bird eggs – seen as the best gauge to determine the health of birds that rest at the lake.

Scientists, bird watchers, duck groups and others are worried that an increase in pollution will affect birds' reproductive success. This is partly due to selenium – a naturally occurring mineral that concentrates in the lake, arriving from various rivers and runoff from other sources such as industry and sewer plants all along the Wasatch Front.

Miller and other scientists are specifically looking at the eggs of mallard ducks, which although aren't found in the open waters they are found to be the most sensitive to selenium than any other species.



*Bill Sinclair (Deputy Director, DEQ), Walt Baker (Director DWQ), and Rick Sprott (Director, DEQ)*

“We wanted to take the most protective approach,” explains Walt Baker, director of Water Quality, who was accompanied on the field trip by DEQ Executive Director Rick Sprott.

The Science Panel, hand picked for their expertise, has concluded that some of the eggs likely will not hatch if the selenium concentrations are between 6.4 and 16 parts per million (ppm). At that concentration, the bird egg mortality is between 2 percent and 21 percent.

The good news, however, is the Great Salt Lake is far from being contaminated with selenium. “The current concentrations are low, roughly around 2.7 parts per million,” says Miller. Even so, a high-powered steering committee comprised of lake users – industry, environmental groups, sewer

districts and others – are recommending to the Water Quality Board to put a cap on selenium in order to prevent the lake from reaching the water quality standard.

Now, the first-ever numeric standard for selenium on the Great Salt Lake is about to be set, perhaps by the end of the year. But setting a standard has provoked much debate.



*Bill Sinclair, DEQ Deputy Director, and Donna Spangler DEQ PIO*

## **Utah's Aquatic Jewel**

The Great Salt Lake averages 75 miles long and 35 miles wide, but is only 33 feet deep at its deepest point.

On this particular day the air-boats and Hover craft maneuvered to avoid the carp and the low-flying birds. It's easy to get stuck, especially with a boat-load of people – which is exactly what happened roughly 22 miles from Farmington Bay near the north shore of the Great Salt Lake when Rick Sprott and Walt Baker became stranded on a submerged bar.

Leland Myers, Theron Miller and others, all clad in hip-waders, jumped in, pushing the craft back and forth to release it from the mud to deeper water. It didn't budge. Barnes then shuttled Bill Sinclair, deputy director of DEQ, and me to a dry sandbar near the sewer canal before speeding back to save Baker and Sprott from their watery predicament.

It was a metaphor for what lake managers face when trying to chart the future.

Setting a numeric standard has divided the diverse group in three ways. Some members want a more stringent selenium standard at around 5 parts per million, which would allow all eggs a chance to hatch. That seems to some to be an impossible standard given that non-selenium factors could impact the hatching success of birds nesting on the lake.

Others stakeholders, primarily industry but with the support of scientists, think a limit of 12.5 parts per million is more realistic. At that concentration, probably one egg in 10 won't hatch. Controls on discharges would start at 5 ppm, and no added selenium discharges would be allowed at 7.5 ppm.

A representative of the brine shrimp industry thinks a 10.4 ppm cap would be a good compromise.

Those are the three recommendations before the Water Quality Board.

It's an emotional issue to some," Miller says. "The diverse nature of the task force and competing interests make coming up with a consensus challenging," Baker adds. "But at the end of the day, we all agree that the lake and its occupants deserve protection."

The Water Quality Board will spend much of the summer deciding a standard. Once a standard is determined, it will be forwarded to the Environmental Protection Agency for consideration and there will be a chance for public comment.

---

## State Sets Greenhouse Gas Emissions Goal

The state of Utah has pledged to reduce its greenhouse gas emissions by 28 percent by 2020 – a goal that supporters say is "ambitious and realistic."

"Our goal is to reduce our emissions to 2005 levels by 2020," Rick Sprott, executive director of the Department of Environmental Quality (DEQ), told a group of reporters at the June 20 announcement. "This is more aggressive than what some states have set and not as aggressive as others."

Dianne R. Nielson, energy adviser for Governor Huntsman, joined Sprott in announcing the goal, a commitment Governor Huntsman made when he joined the Western Climate Initiative – a group of Western states and Canadian provinces developing a regional cap-and-trade program to cut greenhouse gasses. The goal also stems from the Governor's Blue Ribbon Advisory Council on Climate Change (BRAC), which submitted a report to the Governor that lists 72 recommendations, including a statewide goal to reduce emissions.

Sprott and Nielson emphasized the goal is a first step, and not a regulatory mandate.

"As we move forward we have a goal that is meaningful and doable," Nielson said. "We will continue to measure greenhouse gas emissions and make adjustments as we need to."

DEQ commissioned Nicholas Institute for Environmental Policy Solutions at Duke University to analyze the BRAC policy options. The goal reflects input from experts from government agencies, businesses and the public.

To achieve the goal, Sprott and Nielson challenged all Utahns to reduce driving and conserve energy, which in the long run will help save them money. Industry is stepping up to the challenge by building more energy-efficient homes and developing more fuel-efficient vehicles.

"The Utah greenhouse gas reduction goal must be viewed in the context of our state's economy, our natural resource base, and our ability to advance technologically," said Sprott. "It was crafted to balance these very critical interests with the welfare of future generations."

For more information, visit: <http://www.climatechange.utah.gov/>.