

Water Conservation for Data Centers in the Great Salt Lake Basin

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This project proposes that the State of Utah's Office of the [Great Salt Lake Commissioner](#) set water efficiency targets for the tech sector and collaborate with local partners to collect new data on the water usage of local data centers. Doing so will support the Commissioner's Office in its efforts to protect the Great Salt Lake and set an example for other states looking for strategies to curb the tech sector's water consumption in drought-prone regions.

This operational plan provides an overview for how Utah should share these updates with key stakeholders.

OVERVIEW

In an effort to reduce water consumption in the Great Salt Lake Basin, the Office of the Great Salt Lake Commissioner has called on all commercial sectors to do their part to achieve conservation targets laid out in the [Great Salt Lake Strategic Plan](#). The technology sector and its data center facilities are large consumers of water in the Basin. Retrofits to existing facilities and investment in new water efficient technology can be costly, but there are economic incentives that could be deployed to offset the costs associated with use of more efficient technology.

The Commissioner's Office should 1) host an informational webinar with local private data centers as the target audience (see reference section below for a list of suggested names and contacts), and 2) set up a meeting with the National Security Agency's Utah Data Center. These meetings would be used to:

1. Educate stakeholders on the urgent need for industrial water conservation in the Great Salt Lake Basin, using information provided in the [Great Salt Lake Basin Data Center Water Use Fact Sheet](#); and
2. Disseminate information on the economic incentives available to these facilities, should they successfully reduce their water consumption levels.

WEBINAR

The webinar for private data centers should include information about tax deductions and funding available through the Inflation Reduction Act (IRA) ([Incentive 1](#)). We have included a [draft agenda](#) in this document to support implementation of the webinar. This type of informational webinar has proven effective in other domains, as when the [Good Food Institute](#) educated alternative protein companies about funding opportunities available to decarbonize America's industrial sector.

The Commissioner's Office should record the webinar and make it available as a resource on its website, in the new section proposed in the [policy brief](#) entitled "Data Centers," under the [Industry & Recreation](#) tab.

One week after the webinar, the Commissioner's Office should send a follow-up email to participants that includes a summary of key information and a link to the "Data Centers" resource page. A [draft of this email](#) is included below.

MEETING

The meeting with the NSA's Utah Data Center should be used to review the facility's significant water consumption, and strategize on how to reduce its dependency on water from the Great Salt Lake Basin. This meeting should include information about [Incentive 2: Energy Performance Savings Contracting](#), and could include a presentation by a subject matter expert from the Department of Energy. We have included a [draft run of show](#) in this document to support implementation of the meeting.

One week after the meeting, the Commissioner's Office should send a follow-up email to participants that includes a summary of key information. A [draft of this email](#) is included below.

INCENTIVES

[Incentive 1: Inflation Reduction Act Tax Deductions and Funding](#)

The Inflation Reduction Act (IRA) of 2022 includes incentives for energy efficient commercial buildings, which can indirectly support water efficiency through enhanced building performance.

Tax Deductions for Energy Efficient Commercial Building Property (EECBP): Building owners who install EECBP or retrofit properties to improve energy efficiency can claim deductions. These upgrades often include adding efficient fixtures and systems that reduce water use along with energy consumption. The IRA expanded the [179D Tax Deduction](#) for energy-efficient commercial buildings. This deduction is available for buildings that achieve specific energy savings targets. While the primary focus is on energy efficiency, improved systems often contribute to water efficiency as well, particularly in HVAC and plumbing systems. These incentives do not call out

water efficiency specifically, but water efficiency is indirectly included in energy efficiency upgrades made to HVAC systems and other building features. This incentive is only available to owners of commercial buildings.

Resource: [ACEEE: Commercial Building Incentives](#)

Incentive 2: Energy Savings Performance Contracting

The Department of Energy (DOE) has developed a solution to help facilities with high energy and water use finance the upfront costs associated with efficiency retrofits through [Energy Savings Performance Contracting](#) (ESPC). Through this program, a facility owner can partner with an energy service company to finance upgrades with future energy savings. ESPC could be a good option for government facilities like the NSA's Utah Data Center to upgrade their cooling systems, given "government facilities are generally good candidates for ESPC projects, because with long-term ownership of the facilities, governments allow for 10- to 20-year financing terms" (DOE). This is likely not an appropriate opportunity for commercial buildings, which have a shorter payback threshold. The number of [ESPC projects](#) is increasing, as this approach offers a budget neutral way to save money on monthly energy and water bills.

The Commissioner's Office could partner with the DOE to co-host the meeting with the NSA's Utah Data Center so that they can hear about ESPC from an expert in the field.

RECOMMENDED ATTENDEES FOR INFORMATIONAL WEBINAR

Name
Aligned Data Center SLC
Canyon Park-Voonami Orem Data Center
CirrusDS View 78 Data Center
DataBank SLC1-Downtown Salt Lake City
DataBank SLC2,3,4,5,6-Granite Point
EdgeConneX Salt Lake City
Fibernet Utah Data Center
Flexential Salt Lake City-Lindon Data Center
Flexential Salt Lake City-Downtown Data Center
Flexential Salt Lake City-Millcreek Data Center
Flexential Salt Lake City-Fair Park Data Center
Flexential Salt Lake City-South Valley Data Center
Lumen Ogden 1
Lumen Salt Lake City 2
Meta Eagle Mountain Data Center
Novva Salt Lake City
XMission Data Center
Zions Center of Excellence

DRAFT AGENDAS FOR WEBINAR AND MEETING

Draft Agenda for Webinar

- 10:00–10:05 Introductions from the Commission, housekeeping, and welcome
- 10:05–10:15 Background on water scarcity issue in Great Salt Lake Basin and the threats that the lowering lake level could have on environmental and human health
- 10:15–10:25 Overview of growing tech presence, presentation of known water use of data centers in the Basin, and call to action to conserve water in data centers
- 10:25–10:35 Overview of Economic Incentive 1–IRA Tax Deduction
- 10:35–10:45 Questions and discussion from the audience
- 10:45–10:50 Closing and acknowledgment of resources

Draft Run of Show for Meeting with NSA

- 10:00–10:05 Introductions from the Commission and welcome
- 10:05–10:15 Background on water scarcity issue in the Great Salt Lake Basin and the threats that the lowering lake level could have on environmental and human health
- 10:15–10:20 Overview of NSA Utah Data Center’s known water use and call to action to conserve water
- 10:20–10:30 Overview of Economic Incentive 2 featuring DOE ESPC expert
- 10:30–10:55 Discussion and strategy
- 10:55–11:00 Closing and acknowledgment of next steps

DRAFT FOLLOW UP EMAILS

Draft Email for Webinar Attendees

Dear _____,

Thank you for attending our webinar last week, *Water Conservation for Data Centers in the Great Salt Lake Basin*. As you know, we are all dependent on the unique environment, ecology, and economy of our Great Salt Lake Basin, and therefore all have a stake in protecting it. We are excited to engage with you as members of the community.

As we discussed, new tax deductions are available for building owners who place in service either energy efficient commercial building property (EECBP) or energy efficient commercial building retrofit property (EEBRP). This deduction is available for buildings that achieve specific energy savings targets. Upgrades may include the addition of efficient fixtures and systems that reduce water use and energy consumption, such as HVAC or plumbing system upgrades.

We hope you will consider either retrofitting your existing systems or building future systems with these energy savings targets in mind.

You can review the webinar and other resources on our site: [link to webinar].

Please feel free to reach out with any questions you have.

Best,

[Insert Name Here]

Draft Email for Meeting Attendees

Dear _____,

Thank you for attending our meeting last week with Department of Energy (DOE) representative _____ on the subject of water conservation for the NSA's Utah Data Center. As you know, we are all dependent on the unique environment, ecology, and economy of our Great Salt Lake Basin, and therefore all have a stake in protecting it. We are excited to engage with you as members of the community.

As we discussed, the DOE has developed a solution to help high energy- and water-use facilities finance the upfront costs associated with efficiency retrofits through [Energy Savings Performance Contracting](#) (ESPC). ESPC projects are budget neutral ways to invest in efficiency upgrades while saving money in the long term on monthly energy and water bills. We hope you will consider upgrading current systems with these efficiency improvements in mind.

Please feel free to reach out with any questions you have.

Best,

[Insert Name Here]

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