

PUBLIC COMMENT BRIEFING

The Stratos / "Wonder Valley" 9 GW Data Center Proposal

Box Elder County, Utah — MIDA Stratos Project Area

A factual analysis of regulatory authority, infrastructure feasibility, and resource impact — with sourced questions for MIDA officials.

Why this document exists

On April 24, 2026, the Utah Military Installation Development Authority (MIDA) approved a development agreement with O'Leary Digital for the "Stratos Project Area" — a 40,000+ acre hyperscale data center campus in unincorporated western Box Elder County, with a buildout target of up to 9 GW of natural gas-fired generation. On Monday, April 27, 2026, the Box Elder County Commission held a hearing on the proposal but did not take public comment. A follow-up meeting at which public comment will be allowed is scheduled for Monday, May 4, 2026 at 4:00 PM at the Brigham City Fairgrounds, Art Building. The water-rights protest deadline for the project's first publicly filed industrial water rights application falls on Tuesday, May 5, 2026 — the day after the public comment meeting. This briefing compiles publicly verifiable facts from primary sources — Utah statute, federal pipeline filings, state water rights records, EPA designations, and ASHRAE standards — so that residents and commenters can engage MIDA on the factual record. Section 9 anticipates the rhetorical patterns that recur in proceedings of this kind.

Executive Summary

The Stratos / Wonder Valley project is being marketed as a privately financed, off-grid economic development opportunity. The factual record, however, raises six concrete concerns that public officials should answer on the record before any irreversible commitments are made:

1. **Federal and tribal pathways have been left out of public discussion.** Per the Box Elder County resolution itself, the project area includes Hill Air Force Base land, which creates federal touch points for NEPA, NHPA Section 106, and ESA Section 7 review. The Northwestern Band of the Shoshone Nation — federally recognized, headquartered in Brigham City, with documented ancestral occupation of the Promontory area — has standing for tribal consultation. The Wilson's phalarope, a Great Salt Lake-dependent shorebird, received a positive 90-day finding from the U.S. Fish and Wildlife Service on January 23, 2026, and is now in 12-month review for ESA listing. None of these federal pathways have been publicly addressed by MIDA, the developer, or the County to date.
2. **Pipeline arithmetic.** The Ruby Pipeline's federally certificated capacity is approximately 1.5 billion cubic feet per day. A 9 GW combined-cycle gas plant operating continuously consumes roughly the same volume — meaning the project, at full buildout, would require essentially the entire mainline capacity of an interstate pipeline that already serves other shippers. No public document explains how this is technically resolved.
3. **Narrow direct application of state regulation.** Off-grid ("closed private generation system") data centers in Utah operate outside Public Service Commission rate regulation under SB 132 (2025). The state's energy code routes data centers to ASHRAE 90.4 (a less stringent standard than ASHRAE 90.1 for these loads). Utah has no statutory cap on data-center energy efficiency, no mandatory water-efficiency standard, and no statewide data-center water-use reporting requirement. (Industry uses the metrics PUE for energy efficiency and WUE for water; both are defined in the glossary on the next page.) A pledge to "abide by what the state requires" is, in this regulatory landscape, a statement of limited specific content.
4. **Water in a sensitive basin.** The project area straddles Hansel Valley and Locomotive Valley. Locomotive Springs — a state-owned 12,000-acre Waterfowl Management Area on the north shore of Great Salt Lake — has lost more than 50% of its 1960s flow per USGS measurement, attributed primarily to upstream groundwater pumping. A water-rights application (13-4148) for 1,900 acre-feet/year for "Power Plant and Data Center; Steam Generation" from Salt Wells Spring Stream in Hansel Valley has an active protest deadline of May 5, 2026.
5. **Air quality exposure.** Box Elder County is on the Utah Division of Air Quality's nonattainment / maintenance list for permitting purposes. A 9 GW combined-cycle natural gas facility would, at typical capacity factors, emit on the order of 25–30 million metric tons of CO₂ per year — comparable to the entire current statewide power sector — plus permitted NO_x contributing to a region that has not consistently met ozone standards.
6. **Public revenue, private risk.** MIDA reduced the standard energy use tax from 6% to 0.5% and approved an 80% rebate of property taxes on the "compute campus" portion. The headline

"\$30M/year for Box Elder County" figure should be evaluated alongside the full picture of foregone tax revenue, infrastructure burden, and water-rights valuation — not in isolation.

The central finding

There is no Utah statute, no MIDA ordinance, no Box Elder County code, and no IECC provision that requires a 9 GW off-grid data center to meet any specific Power Usage Effectiveness (PUE), Water Usage Effectiveness (WUE), or total-campus efficiency standard. If MIDA does not write enforceable performance requirements into the Stratos development agreement, none will exist. The state of Utah is not obligated to impose any campus-efficiency standard on this facility, and at present has not done so.

Key terms used in this briefing

PUE (Power Usage Effectiveness): An industry energy-efficiency metric for data centers — the ratio of total facility energy to the energy actually used by computers. 1.0 is theoretically perfect; 1.3 means 30% of the facility's power is consumed by cooling and other overhead beyond the IT load. Lower numbers are more efficient. WUE (Water Usage Effectiveness): The same kind of ratio for water consumption. CCGT (Combined Cycle Gas Turbine): The most efficient form of natural-gas power generation, using both a gas turbine and a steam turbine driven by the gas turbine's exhaust heat. CCS (Carbon Capture and Sequestration): Capturing CO₂ from exhaust gases and burying it underground. BACT (Best Available Control Technology): The pollution-control equipment a regulator can require on a permitted source. PSC (Public Service Commission): Utah's state utility regulator. DAQ (Division of Air Quality): Utah's state air-pollution agency, under the Department of Environmental Quality. NSR (New Source Review): The federal-state air-pollution permit process for major new sources. GRAMA (Government Records Access and Management Act): Utah's open-records law. FERC (Federal Energy Regulatory Commission): The federal agency that regulates interstate gas pipelines and electricity transmission. Interlocal agreement: The contract between MIDA and Box Elder County governing the project area's terms — the document where conditions must be written before consent.

1. The Project: Stratos / Wonder Valley

1.1 Core facts as represented by MIDA and the developer

The following facts are drawn from MIDA board materials, the Box Elder County Commission record, and statements by MIDA Executive Director Paul Morris and developer representatives reported in the Salt Lake Tribune, Deseret News, KSL, KPCW, Data Center Dynamics, and Tom's Hardware between February and April 2026.

Project name	Stratos Project Area, marketed as "Wonder Valley"
Location	Unincorporated western Box Elder County, Utah; Hansel Valley, Locomotive Valley, and adjacent areas (Golden Spike District)
Footprint	~40,000 acres of private land + 1,200 acres of military / state-owned land + portion of Utah Test and Training Range
Developer	O'Leary Digital Utah Development Company (Kevin O'Leary) with West GenCo LLC handling permitting / state regulatory coordination
State partner	Utah Military Installation Development Authority (MIDA) — board chaired by Senate President J. Stuart Adams
Power source	100% on-site natural gas generation drawn from the Ruby Pipeline ("Shadow Grid" model). "Will not take one electron from the existing grid" — per Paul Morris.
Phase 1 capacity	~3 GW
Full buildout	Up to 9 GW (Tom's Hardware, Tribune, KPCW); MIDA project documents reference 7.5 GW. State of Utah total electricity consumption is approximately 4 GW average.
Cooling design	Air-cooled / closed-loop liquid cooling claimed; "less water than ranching" per Morris. No published WUE figure or audited cooling design.
Tax structure	Energy use tax reduced 6% → 0.5%; 80% rebate of property tax on the "compute campus"; 100% personal property tax relief via rebate; real property tax rate 0.927% with 80% returned to developer
Tenants	None publicly named. Project speculatively positioned for Amazon, Microsoft, or Google.
Governance	MIDA project area created under Utah Code Title 63H, Chapter 1. MIDA board is appointed, not elected.

1.2 Process timeline of public concern

- Box Elder County Commissioner Tyler Vincent, on the record to the Salt Lake Tribune, said commissioners learned of the project only three weeks before the scheduled vote and described the experience as "drinking out of a fire hose."
- On April 22, 2026, commissioners tabled the formal land-use consent resolution after substantial public comment expressed concerns about traffic on rural roads, aquifer impacts, brine processing, agricultural land values, and the compressed timeline.
- The MIDA board approved the development agreement on April 24, 2026 by unanimous vote of an unelected board, contingent on Box Elder County Commission consent.
- On Monday, April 27, 2026, the Box Elder County Commission held a hearing on the proposal at which public comment was NOT taken. The Commission scheduled a follow-up public comment meeting for Monday, May 4, 2026, at 4:00 PM at the Brigham City Fairgrounds, Art Building.
- The water-rights protest deadline for Application 13-4148 (the project area's first publicly filed industrial water rights request) is Tuesday, May 5, 2026 — exactly one day after the public comment meeting.
- Multiple residents in earlier public comment described prior requests by project representatives to "keep it quiet" before the proposal became public.

Critical date sequence

Apr. 22: County tabled the consent resolution. Apr. 24: MIDA board approved the development agreement (unanimous, unelected). Apr. 27 (today): County hearing held — no public comment taken. May 4 (4:00 PM, Brigham City Fairgrounds, Art Building): County meeting with public comment allowed. May 5: Water-rights protest deadline for Application 13-4148. The compression is deliberate — and it gives commenters one day, between the public hearing and the protest deadline, to assemble formal protests on the record.

2. The Regulatory Landscape: What Does and Does Not Apply

The most consequential fact about this project is what is NOT being regulated. Utah's regulatory framework, as it currently exists, does not impose enforceable campus-efficiency requirements on a closed private generation data center. The following sections document each gap with citations.

2.1 MIDA authority and the county's role

MIDA is created under Utah Code Title 63H, Chapter 1 (the "MIDA Act"). Its authority is narrowly tailored:

- **Origin:** Created in 2007 to facilitate development of military and adjacent private land. Original authority was limited to projects supporting military installations.
- **Board composition:** Seven members. Five appointed by the Governor; one each by the Senate President and Speaker of the House. Per Utah Code 63H-1-302. None are directly elected by Box Elder County voters.
- **Tax authority:** Can levy MIDA energy tax (63H-1-204), MIDA accommodations tax (63H-1-205), and capture property tax allocations within a project area. Can issue tax-increment financing (63H-1-502).
- **County consent requirement:** Per 63H-1-401, when private land located in unincorporated county area is included in a project area, the county legislative body must pass a resolution consenting to the inclusion. This is the central decision point now before the Box Elder County Commission.
- **Land-use authority within project area:** Once a project area is established and the county has consented, MIDA's project area plan governs development standards. MIDA establishes its own land-use approach (e.g., master development plans). This is significant: county zoning effectively yields to the MIDA project area plan within the boundaries.

What this means in plain terms

The Box Elder County Commission consent vote is the single most consequential local-government decision on this project. After consent, the county's ability to impose its own zoning, water-use, or development standards within the 40,000-acre project area is substantially diminished. Any conditions Box Elder County wants enforced — water reporting, PUE caps, decommissioning bonds, road-impact fees, cooling-design verification, noise limits — must be negotiated into the interlocal agreement BEFORE consent is granted. After consent, the leverage is gone.

2.2 The IECC data center carve-out (already in place)

The Utah Energy Code is the 2021 IECC with state amendments. For commercial buildings, this code generally requires compliance with mechanical efficiency standards in Sections C403.4 and C403.5. However, the code contains a specific carve-out:

Utah Energy Code, Chapter 4 [CE], C403.1.2 (codified in IECC 2021)

"Data center systems are exempt from the requirements of Sections C403.4 and C403.5. Design loads associated with heating, ventilating and air conditioning of the building shall be determined in accordance with ANSI/ASHRAE/ACCA Standard 183 ... Data center systems shall comply with Sections 6 and 8 of ASHRAE 90.4."

The practical effect: data centers do not have to meet the same HVAC, equipment efficiency, and lighting prescriptive requirements as a Class A office tower. They are routed to ASHRAE 90.4, a separate standard developed specifically for the data center industry.

How ASHRAE 90.4 differs from ASHRAE 90.1

- **Performance, not prescription:** ASHRAE 90.4 uses Mechanical Load Component (MLC) and Electrical Loss Component (ELC) instead of prescriptive equipment requirements. The standard explicitly states these are NOT directly comparable to PUE.
- **Tradeoff path:** The standard provides an alternative compliance path that allows tradeoffs between mechanical and electrical components. A facility that fails MLC can compensate with better ELC, and vice versa.
- **PUE was removed:** Early drafts of 90.4 included mandatory PUE caps (1.30 to 1.61 by climate zone). Industry pushback removed all PUE references from the final standard. There is now no enforceable PUE ceiling in any code Utah has adopted.
- **No water requirement:** ASHRAE 90.4 does not contain a Water Usage Effectiveness (WUE) standard. Water consumption is not regulated by this code at all.

2.3 Utah SB 132 (2025): the off-grid pathway

On May 7, 2025, Senate Bill 132 — sponsored by Sen. Scott Sandall (R-Tremonton) and floor-sponsored by Rep. Colin W. Jack — took effect. The bill creates three legal pathways for large electrical loads (defined as 100 MW or greater):

7. **Traditional utility service** from a regulated utility (Rocky Mountain Power, etc.) under existing PSC oversight.
8. **Connected generation system** — customer contracts separately with a generation provider but uses utility transmission. Pays for transmission service, interconnection studies, and any system upgrades.
9. **Closed private generation system** — operates entirely behind the meter with no connection to the local grid. THIS IS THE STRATOS MODEL.

Per the bill summary on the Utah Legislature's official tracking site, SB 132 "exempts service provided under this chapter from certain rate regulation requirements while maintaining safety and reliability standards."

What a closed private generation system is exempted from:

- Public Service Commission rate regulation.

- Integrated Resource Planning (IRP) review by the PSC.
- Demand-side management / utility energy efficiency program participation.
- Rate-impact protection mechanisms designed for retail customers.
- Generation portfolio review (no requirement to demonstrate any percentage of clean energy).

What still applies:

- Federal Clean Air Act / Utah DAQ air permits for combustion sources.
- State Engineer water rights process (Title 73, Utah Code).
- Local zoning until preempted by MIDA project area plan.
- Building, plumbing, mechanical, electrical, and fuel gas codes.
- Federal pipeline safety oversight (PHMSA).

A precedent already operating: Joule Capital Partners, Millard County

Stratos is not the first project to use the closed private generation pathway. Joule Capital Partners broke ground in November 2025 on a 4 GW data center campus on 4,000 acres of former farmland near Fillmore, Utah, with a near-identical structure. Initial public reporting and air-permit filings document the following:

- **Six data center buildings**, each powered by 69 Caterpillar G3520K natural-gas-fired reciprocating engines (414 engines total at this stage).
- **4,380 tons per year** of total air pollution at the initial six-site phase, including 1,380 tons per year of NOx (ozone precursor).
- **NOx emissions intensity of 0.15 kg/MWh** — roughly 6.5 times higher than Utah's combined-cycle Lake Side Power Plant on a per-MWh basis (Trellis, December 2025).
- **10,000 acre-feet per year** of groundwater rights (~3.26 billion gallons annually) — about 5.3× the Stratos Application 13-4148 filing of 1,900 acre-feet, which provides a useful frame for what the eventual full-buildout water demand at Stratos may look like.
- **Conditional use permit process delayed** into 2026 by community opposition, despite zoning approval in August 2025. State Sen. Nate Blouin (D-Salt Lake) has publicly criticized these projects and called for greater oversight.

Joule and Stratos are not the same size, and the comparison should be specified rather than generalized. By acreage, Stratos at 40,000 acres is approximately 10× the size of Joule's 4,000-acre footprint. By announced generation capacity, Stratos at 9 GW is approximately 2× Joule's announced 4 GW. (Joule's public materials also describe a potential 12 GW scale, which is larger than Stratos's announced 9 GW.) Joule's publicly documented emissions profile, water demand, and equipment count therefore offer one available reference point for what large off-grid data-center campuses look like in operation in Utah today, with the caveat that the Caterpillar G3520K reciprocating-engine architecture Joule has selected is more emissions-intensive on a per-MWh basis than utility-scale combined-cycle gas turbines. MIDA and the developer have not publicly disclosed the generator configuration for Stratos; depending on configuration, the per-MWh emissions intensity at Stratos could differ materially from Joule's.

2.4 What Utah does NOT have

The list below identifies protections that do not appear in Utah law as of the date of this briefing:

- No statewide PUE (Power Usage Effectiveness) ceiling for data centers.
- No statewide WUE (Water Usage Effectiveness) ceiling for data centers.
- No mandatory water-use reporting law (a bill from Rep. Jill Koford requiring reporting for facilities $\geq 50,000$ sq ft is pending but not enacted).
- No 100-year water supply demonstration requirement (unlike Arizona for its Active Management Areas).
- No California Title 24-equivalent data-center water-efficiency rule.
- No statewide moratorium or pause for impact assessment (unlike Maine, which is enacting a pause until November 2027).
- No requirement that off-grid generation match the carbon intensity or efficiency of the utility-served alternative.
- No decommissioning bond or end-of-life financial assurance requirement specific to behind-the-meter generation.

The honest framing

When MIDA or developer representatives say "we will comply with all applicable Utah requirements," that statement is accurate, but its specific content for off-grid data centers is narrow. There are few applicable Utah requirements that specifically govern campus-level efficiency, water use, or carbon intensity for facilities of this kind. The compliance pledge therefore points to a body of state law that does not yet contain the substantive standards a reader might assume from the phrasing.

Utah's commercial energy code has been amended to soften, not strengthen, the relevant requirement

Utah's most recent statewide IECC amendment, codified at Utah Code §15A-3-701, deletes IECC Section C405.11 (the 2021 IECC's automatic-receptacle-control requirement for commercial buildings) and replaces it with: "Automatic receptacle control to be optional and decided by property owner." The state's own training materials describe this as "the only amendment to the commercial provisions" of the IECC. The single statewide amendment Utah has adopted to its commercial energy code in this cycle therefore makes one specific commercial energy-efficiency requirement optional rather than mandatory.

Combined with the so-called anti-stringency provision at Utah Code §15A-1-204 — which generally bars a city or county from adopting a construction-code rule more restrictive than the State Construction Code on subjects the state has already addressed — this means Box Elder County's room to negotiate stricter campus-level efficiency standards through the construction-code path is narrow. The lever a

county does retain is the development agreement, which is a project-specific instrument rather than a general code obligation.

3. Federal and Tribal Pathways for Project Review

Sections 1 and 2 describe how Utah law applies to Stratos. This section describes a parallel set of federal, tribal, and federally-mandated state-emergency frameworks that may also apply, depending on the project's exact configuration. These are mostly Layer 1 questions — that is, questions about whether the project should be built at this location at all — rather than Layer 2 questions about the conditions under which it operates. They are presented here because most public discussion of Stratos has focused entirely on the state regulatory layer, and several of the federal hooks have been overlooked in the public record so far.

Important framing

The presence of a possible federal review pathway is not the same as the certainty of a federal review actually occurring. Federal review attaches to federal action, not to the bare existence of federal interests in a landscape. Whether NEPA applies depends on whether a federal agency takes a permitting, funding, or land-disposition action on this project. Several of the items below identify federal touchpoints that a careful review process should examine; whether they ultimately compel review is a question that federal agencies — not the developer, MIDA, or the County — will determine.

3.1 The federal nexus: Hill Air Force Base land in the project area

Per the Box Elder County resolution introduced for adoption in late April 2026 and reported by KSL on April 24, 2026, the Stratos project area "includes private land, Utah National Guard property and Hill Air Force Base land in unincorporated portions of the county." The exact acreage of the Hill AFB component has not been publicly disclosed in the project documents reviewed for this briefing. But the categorical fact — that the project area includes federal land owned by the Department of the Air Force — has the following consequence: any action by the Air Force, or any other federal agency, involving the use, lease, easement, transfer, or disposal of that land is a federal action. Federal action is the trigger for the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA) Section 106, and the Endangered Species Act (ESA) Section 7.

During the 2025 Utah Legislative Session, the annual MIDA "clean-up" bill (SB 316, sponsored by Sen. Jerry Stevenson) initially included a provision that would have allowed MIDA itself to act as a NEPA lead agency in certain circumstances. After approximately 2,000 public messages organized by Save Our Canyons and other groups, the sponsor removed that provision in the third substitute, which was the version ultimately adopted. The implication is that as of this briefing's date, MIDA does not have NEPA lead-agency authority. Federal agencies retain that role for federal actions in MIDA project areas. The fact that the legislature attempted to give MIDA NEPA lead authority is itself evidence that the framers of the MIDA model recognized federal review otherwise applies.

3.2 NHPA Section 106 and tribal consultation

The Northwestern Band of the Shoshone Nation is a federally recognized tribe (recognition restored in 1987), with its tribal headquarters in Brigham City — the same city in which the May 4 Stratos public meeting will be held. Published archaeological and ethnohistorical literature documents the Promontory area as ancestral wintering grounds for the Northwestern Shoshone; the Treaty of Box Elder was negotiated and signed at Box Elder on July 30, 1863; and the Bear River Massacre site, located just north of the Utah-Idaho line and the largest single massacre of Native people in U.S. history, is in the same regional landscape. The Tribe is currently a party to active federal litigation (Northwestern Band of the Shoshone Nation v. Wooten, 9th Cir. 2023) concerning treaty hunting rights, which means the federal trust relationship is operationally live.

Section 106 of the National Historic Preservation Act (54 U.S.C. §306108) requires federal agencies to take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation an opportunity to comment. "Historic properties" includes traditional cultural properties and landscapes of significance to Indian tribes. Executive Order 13175 separately requires meaningful tribal consultation on federal actions with tribal implications. If Stratos triggers federal action through Hill AFB land, FERC pipeline modifications, USACE wetland permitting, or any other federal nexus identified below, those triggers also activate tribal consultation requirements.

The Promontory archaeological complex itself is an unusual concentration of cultural resources. The Promontory Caves yielded the type assemblage for the "Promontory Phase" (~1250-1350 CE), now widely interpreted as a Proto-Apachean (Athabaskan) cultural occupation. The caves were excavated by Julian Steward in the 1930s and re-investigated by Dr. Jack Ives (University of Alberta) and Dr. Joel Janetski (BYU) from 2011-2014, with the moccasin and faunal collections currently held at the Natural History Museum of Utah. Whether or not specific Promontory Phase sites lie within the Stratos project boundary, a project of this scale in this landscape implicates the broader cultural setting in ways that Section 106 is designed to surface.

3.3 Endangered Species Act: an active listing process

On January 23, 2026 — three months before this briefing's date — the U.S. Fish and Wildlife Service issued a positive 90-day finding on the petition to list the Wilson's phalarope (*Phalaropus tricolor*) as a threatened species under the Endangered Species Act. The petition, originally filed March 28, 2024 by the Center for Biological Diversity, Oikonos Ecosystem Knowledge, the Mono Lake Committee, Utah Physicians for a Healthy Environment, and Utah Youth Environmental Solutions, cites the decline of the Great Salt Lake as the central threat to the species. Up to 60% of the global Wilson's phalarope population uses the Great Salt Lake during fall migration, and the population has declined approximately 70% since the 1980s.

A positive 90-day finding does not mean the species is listed. It means the petition presents "substantial scientific or commercial information indicating that listing may be warranted," and the Service must now conduct a 12-month status review. If the species is ultimately listed (or even designated as a candidate species under a state-federal agreement), ESA Section 7 consultation requirements would apply to any federal action that may affect the species or its habitat, and Section 9's prohibition on "take" would

apply to actions that harass, harm, pursue, or modify habitat. Habitat modification through hydrologic depletion is a recognized form of take. The point of including this here is not to claim that listing is certain or imminent. It is to note that adding a major new industrial water consumer in the Great Salt Lake's tributary basin during an active federal listing review is a regulatory exposure that deserves attention from project sponsors, lenders, and tenants — not just from opponents.

Several other species in the regional ecosystem warrant inclusion in any environmental review. The Bonneville cutthroat trout (*Oncorhynchus virginalis utah*) is on the Utah Sensitive Species List and the subject of a USFWS conservation agreement; the eared grebe relies on the Great Salt Lake to a similar degree as the Wilson's phalarope; and the migratory bird use of Locomotive Springs Waterfowl Management Area (the named purpose of the WMA) brings the Migratory Bird Treaty Act into play.

3.4 The hydrologic record is already federally documented

The U.S. Geological Survey has been studying the relationship between groundwater pumping in Curlew Valley and the discharge of Locomotive Springs for half a century. USGS Technical Publication 45, *Water Resources of the Curlew Valley Drainage Basin, Utah and Idaho* (Baker, 1974), was specifically commissioned, in cooperation with the Utah Department of Natural Resources, "to determine whether or not the flow of Locomotive Springs — a source of water for a State Waterfowl Management Area — has been or will be diminished as a result of ground-water withdrawals elsewhere in Curlew Valley." The 2008 USGS / Utah Geological Survey follow-up confirmed the connection: Locomotive Springs flow declined from 33 cfs (1969-1972) to 14 cfs (1993-1996), a more than 50% reduction attributed primarily to upstream pumping.

The Stratos project area is in the Hansel Valley, which sits within the Curlew Valley drainage. The West Hansel fault system is the documented groundwater conduit feeding Locomotive Springs from the northeast. The hydrologic question of how new industrial-scale groundwater pumping in this drainage will affect the Springs is therefore not a hypothetical question requiring fresh study; it is a question with a 50-year published federal answer. New extractions in the same drainage have, at every prior step, reduced the Springs' flow.

3.5 The Great Salt Lake state-emergency framework

Utah's own state government has spent four consecutive legislative sessions (2022 through 2026) on Great Salt Lake water-recovery legislation. The Great Salt Lake Commissioner is a statutory office. The state's 2024 Strategic Plan describes the lake as facing systemic decline. HB 453 (2024) tripled the severance tax on mineral extraction to incentivize voluntary water-use reductions. In 2025, the state spent \$30 million through the Division of Forestry, Fire and State Lands to acquire US Magnesium's 144,000 acre-feet annual water rights for retirement and lake refill. Compass Minerals voluntarily donated more than 200,000 acre-feet annually back to the lake under HB 453's incentive framework.

The trajectory of state policy is unambiguous: Utah is paying real money to retire industrial water rights in the Great Salt Lake watershed in order to send more water to the lake. Adding a brand-new 1,900 acre-feet-per-year industrial extraction in a tributary drainage — with the explicit purpose of running

gas turbines and cooling computer servers — runs in the opposite direction of declared state policy. This is an inconsistency between two simultaneous Utah state actions, not a federal-vs-state question. It is reasonable to ask the County, MIDA, and the State Engineer how they reconcile the two.

3.6 Other federal hooks worth flagging

Several additional federal authorities may attach depending on project specifics that are not yet publicly disclosed:

- **Federal Energy Regulatory Commission.** If supplying 9 GW of generation requires modification, expansion, or new compression on the Ruby Pipeline, that modification triggers FERC Section 7 review under the Natural Gas Act, which carries its own NEPA process. Public participation is a formal part of FERC review.
- **U.S. Army Corps of Engineers.** If the project disturbs wetlands or waters of the United States, Clean Water Act Section 404 permitting applies. Locomotive Springs feeds documented wetland complexes.
- **Clean Water Act Section 401.** State water-quality certification is required for any federal license or permit (including a §404 permit), and certification can be granted, denied, or conditioned.
- **EPA Clean Air Act PSD.** Any new or modified major source of air pollution in an attainment area requires Prevention of Significant Deterioration permitting, including Best Available Control Technology analysis.
- **EPA NPDES construction stormwater.** A site disturbance of one acre or greater requires a Construction General Permit. The Stratos project area as described would disturb several orders of magnitude more than this threshold.

3.7 The water-rights protest as the most time-bounded review pathway

Of the pathways above, the water-rights protest has the simplest and most time-bounded structure for direct public participation. The State Engineer must consider every protest filed against Application 13-4148 by the May 5, 2026 deadline. The standard for granting an application includes whether "there is reason to believe that the application can be approved" without, among other things, impairing existing rights or being detrimental to the public welfare. Locomotive Springs is a documented source of water for a State Waterfowl Management Area; existing senior water rights in the Curlew Valley basin are documented; and the public-welfare implications of declining Great Salt Lake levels have been characterized in the state's own strategic-planning materials. The State Engineer's options on a protested application include approval, conditional approval, denial, or further hearing; a protest does not depend on a federal agency acting first.

Protests may be filed at <https://www.waterrights.utah.gov> by any "interested party," which is interpreted broadly under Utah practice. Protests should be specific, factual, and grounded in the standards at Utah Code §73-3-8.

4. The Ruby Pipeline: Capacity, Demand, and Arithmetic

MIDA has stated that 100% of the project's power will be generated on site from natural gas drawn off the Ruby Pipeline. The arithmetic of that claim, at full 9 GW buildout, deserves scrutiny.

4.1 Ruby Pipeline as built

The Ruby Pipeline is a 42-inch-diameter, 675-mile interstate natural gas line built under FERC Certificate (Docket CP09-54-000), running from Opal, Wyoming through Box Elder County, Utah and across Nevada to the Malin Hub in Klamath County, Oregon. Per the Federal Register notice of application (74 FR 7558, February 17, 2009):

- Total certificated capacity: approximately 1,500,000 MMBtu/day (≈1.5 Bcf/day).
- Compressor station in Box Elder County: Wildcat Hills, 28,668 horsepower.
- Other shippers along the route — including Pacific Gas & Electric, Northwest Pipeline, and Idaho Power — already hold contracted capacity.

4.2 Gas required for 9 GW of generation

Working assumptions for the calculation, all favorable to the developer:

- Combined-cycle gas turbine (CCGT) plant at 55% net thermal efficiency (state-of-the-art; many actual plants run lower).
- Continuous operation (data center loads are essentially 24/7/365).
- Natural gas heating value of approximately 1,037 BTU/cubic foot (HHV).

Scenario	Result
9 GW @ 60% efficiency (best-in-class CCGT)	≈ 1,228,000 MMBtu/day = 82% of Ruby capacity
9 GW @ 55% efficiency (modern CCGT)	≈ 1,340,000 MMBtu/day = 89% of Ruby capacity
9 GW @ 50% efficiency (typical CCGT)	≈ 1,474,000 MMBtu/day = 98% of Ruby capacity
9 GW @ 35% efficiency (simple cycle)	≈ 2,106,000 MMBtu/day = 140% of Ruby capacity (exceeds)
Phase 1 (3 GW) @ 55% efficiency	≈ 447,000 MMBtu/day = 30% of Ruby capacity

The sensitivity analysis above is critical: at typical CCGT efficiency (50%) the project would consume essentially the entire pipeline. The 89% figure is not a worst case — it assumes modern, well-optimized combined-cycle generation. At simple-cycle efficiency, demand exceeds the pipeline by 40%.

The unanswered question

Even at best-in-class combined-cycle efficiency, a 9 GW Stratos campus would require roughly 89% of the entire Ruby Pipeline's certificated capacity — a pipeline that has existing firm transportation contracts with West Coast utilities. Phase 1 alone (3 GW) would require ~30% of mainline capacity. Public materials on the Stratos project do not explain: (1) how the necessary firm transportation capacity will be acquired without displacing existing shippers; (2) whether a new lateral, looping, or compression upgrade is contemplated; (3) what the FERC Section 7 process timeline would be; (4) what the air-quality permit pathway will be for a gas plant of this scale.

4.3 The Phase 1 / Phase N rhetorical pattern

Public commenters should note a common framing pattern in the project's public roll-out: the headline number (9 GW) appears in marketing copy and tax-revenue projections, while the regulatory and infrastructure descriptions retreat to the smaller Phase 1 figure (3 GW). At 3 GW the math is more tractable, but the development agreement is for the full project area and the full buildout. A consent decision today is functionally a consent decision for 9 GW.

5. Water Resources: A Sensitive Basin in Decline

5.1 The hydrologic context

The project area is located in some of the most water-stressed terrain in northern Utah:

- **Hansel Valley** is a closed groundwater basin with no surface inflows. According to long-time residents who have spoken on the record, "deep water wells" are the only water source available.
- **Locomotive Springs Waterfowl Management Area** — a state-owned 12,000-acre wildlife refuge on the north shore of Great Salt Lake — sits hydrologically downgradient of the project area. A 2008 cooperative study by the Utah Geological Survey and Utah Division of Water Rights documented Locomotive Springs flow as having declined by more than half from late-1960s baselines, attributed primarily to upstream groundwater pumping. Total flow dropped from approximately 24,000 acre-feet/year (1969-1972) to approximately 10,100 acre-feet/year (1993-1996); USGS gauge measurements show approximately 33 cfs declining to approximately 14 cfs over the same window.
- **Great Salt Lake itself** remains roughly 6 feet below the elevation that scientists and state resource managers identify as the minimum healthy level. Governor Cox's stated goal is to refill the lake before the 2034 Winter Olympics. Locomotive Springs water historically reached the lake; reductions in spring flow are part of the broader inflow problem.

5.2 The 1,900 acre-foot data center water rights application

The most concrete and time-sensitive evidence of project water demand is already in the public record at the Utah Division of Water Rights:

Application 13-4148 (a54385) — published in the legal notice section

Bar H Ranch, Inc. proposes using 2.75 cfs OR 1,900 acre-feet from the Salt Wells Spring Stream (Hansel Valley, Box Elder County) for INDUSTRIAL: Data Center water use. 1,900 acre-feet for Power Plant and Data Center; STEAM GENERATION. Protests must be filed with the Division of Water Rights on or before May 5, 2026.

For context: 1,900 acre-feet equals approximately 619 million gallons per year. At Utah's per-capita average of 167 gallons/day, that volume is equivalent to the residential water consumption of approximately 10,000 Utah residents. This single application — not yet at full buildout scale — is for a quantity larger than several existing data centers in the Salt Lake area combined.

5.3 What "less water than ranching" does and does not mean

MIDA Executive Director Paul Morris has stated publicly that the Stratos project will use "less water than ranching" through closed-loop, air-cooled technology. Several caveats apply to that claim:

- Air-cooled designs trade water consumption for higher electrical consumption (more fan power, more chiller load), which then increases natural gas combustion and associated emissions. The trade is real, not free.
- The cited Novva campus in West Jordan — often used as the model for low-water designs — used roughly 3 million gallons in a year on 120 MW of capacity. Linear scaling to 9 GW would suggest 225 million gallons/year (~690 acre-feet), but this scaling is uncertain and depends on cooling design choices that have not been made public.
- Water needed for steam-cycle heat rejection at a 9 GW gas plant is a separate and potentially much larger demand than IT cooling water. The water rights application above is explicitly for "Power Plant and Data Center; Steam Generation," indicating that steam-cycle water is in fact part of the project.
- "Less than ranching" is comparative and ambiguous. Ranching in Hansel Valley uses minimal water per acre because the valley is arid; the relevant comparison is to the cumulative regional groundwater budget and Locomotive Springs flow, not to ranching.

5.4 The water-rights framework has no efficiency component

Utah's water-rights system, governed by the State Engineer (Title 73), allocates QUANTITY but does not regulate EFFICIENCY of use after the right is granted. Once water rights are perfected, there is no statutory mechanism to require WUE compliance, audit, or improvement. This is the same gap as exists in the energy code: the volumes can be allocated, but there is no performance standard for how that allocation is consumed.

6. Air Quality: A 9 GW Gas Plant in a Maintenance-Area County

6.1 Box Elder County's regulatory air quality status

Box Elder County is on the Utah Division of Air Quality's official list of "Maintenance or non-attainment areas" for permitting fee purposes (DAQ Air Quality Fees and Payments). This designation reflects the county's historical PM2.5 issues. While the EPA in November 2025 removed the broader Wasatch Front from the dirty-air list for the 2006 PM2.5 standard, the region continues to struggle with:

- Summertime ozone — the region remains under scrutiny for the 2015 ozone NAAQS (70 ppb).
- Wintertime inversion pollution — the topographic and meteorological conditions that cause inversions have not changed.
- Dust from the drying Great Salt Lake bed.
- Increasing area-source emissions — natural gas-fired generators at data centers have been specifically identified by the Salt Lake Tribune and DAQ-affiliated voices as a new contributing source.

6.2 Estimated emissions at full buildout

Combining published emissions factors for state-of-the-art combined-cycle natural gas generation:

Pollutant	Lifecycle emissions factor	Annual emissions at 9 GW × 90% capacity factor (~71 TWh/yr)
CO ₂ (lifecycle)	~490 g CO ₂ eq/kWh (IPCC AR5 median for CCGT)	≈ 34.8 million metric tons/yr
CO ₂ (combustion only, best-case CCGT)	~350 g CO ₂ /kWh	≈ 24.9 million metric tons/yr
Equivalent passenger cars	EPA: ~4.6 t CO ₂ /yr per car	≈ 5.4 to 7.6 million passenger cars

Scale comparison

At full buildout, the Stratos campus would emit annual CO₂ comparable to Utah's entire current power sector. For perspective, Utah's total electricity-sector emissions in recent years have been on the order of 30 million metric tons of CO₂. A single data center campus would roughly double that — adding emissions equivalent to taking 5-7 million cars off the road in reverse.

6.3 The permitting pathway under Utah DAQ

Any combustion source of this scale would require:

10. New Source Review (NSR) Approval Order under R307-401.
11. Title V Operating Permit (federal, delegated to DAQ).

12. Best Available Control Technology (BACT) determination.
13. PSD (Prevention of Significant Deterioration) review for major sources.
14. Conformity demonstration with the State Implementation Plan.
15. Public notice and comment period.

Crucially, NSR Approval Orders typically include emissions caps (tons per year) and operational restrictions. The Novva data center precedent in the Salt Lake Valley illustrates how this works: Novva's permits capped gas-fired generator emissions and limited diesel generators to 42 hours per year. When those caps proved insufficient for hyperscaler demand, the company sought a presidential exemption from the Clean Air Act through the EPA's federal exemption process — bypassing state regulators entirely. Utah DAQ stated it was unaware of Novva's federal exemption request.

This is the loophole pattern: state permits with strict caps → developer seeks federal preemption when demand exceeds caps → state regulators learn about it after the fact.

7. The Tax Structure: What the Headline Numbers Reflect

7.1 The exemptions the developer is receiving

The MIDA-approved development agreement contains the following tax concessions. Each of these reduces what would otherwise be standard tax obligations:

Tax	Standard rate	Effective Stratos rate
MIDA energy use tax	6.0%	0.5% (92% reduction)
Real property tax (compute campus)	0.927%	0.927% with 80% rebated to developer
Personal property tax	Standard schedule	100% rebated to developer
Additional MIDA tax incentives	Various	Tax-increment financing (TIF) capture per 63H-1-502

7.2 What the headline numbers do and do not include

MIDA's \$30M/year (Phase 1) and \$108M/year (full buildout) revenue projections to Box Elder County require scrutiny on several points:

- **Tax basis assumptions:** The projections depend on assessed property values and energy throughput that are projections from MIDA, not independently verified.
- **Foregone revenue:** The 92% energy-tax reduction and 80% property-tax rebate together represent a substantial transfer from the public tax base to the developer. The headline figure shows what's collected; it does not show what was foregone.
- **Revenue volatility:** Energy-tax revenue scales with energy delivered to the consumer. If the project under-builds, the revenue under-delivers. The 9 GW number is aspirational; tax projections assume it materializes.
- **Job projections:** MIDA references 2,000 permanent jobs at full buildout. The Kem C. Gardner Policy Institute's recent analysis put statewide permanent data center operations jobs at 2,000-3,250 by 2030 across ALL Utah data centers. The Stratos number, on its own, would represent the entirety of statewide permanent data center employment.
- **Infrastructure burden:** Rural Box Elder roads, emergency services, water-system planning, and utility infrastructure will all be impacted. None of these costs are itemized in the public revenue projections.

7.3 The constituent question — and the foregone-revenue math

Box Elder County residents and the County Commission should ask: at the standard 6% energy use tax rate (the rate every other consumer in Utah pays on energy), what would Phase 1 revenue be? At full buildout? The difference between that figure and the actual \$30M / \$108M projections is the per-resident transfer to O'Leary Digital.

A first-pass estimate, using publicly available assumptions:

- **Energy delivered at full buildout:** $9 \text{ GW} \times 8,760 \text{ hours} \times 90\% \text{ capacity factor} = \sim 70,956,000$ MWh/year.
- **Assumed delivered value:** \$50/MWh (a midpoint estimate; the MIDA energy tax is calculated on "Delivered Value of the Taxable Energy").
- **Taxable energy value:** $\approx \$3.55$ billion/year.
- **At standard 6% rate:** $\approx \$213$ million/year in tax revenue.
- **At Stratos's effective 0.5% rate:** $\approx \$18$ million/year in tax revenue.
- **Foregone annual revenue at full buildout: approximately \$195 million per year — or roughly \$7 billion across a 35-year operating life.**

The order-of-magnitude check

MIDA projects \$108 million/year for Box Elder County at full buildout. Even using a conservative \$50/MWh delivered value, the foregone tax revenue from the 92% energy-tax cut alone is on the order of \$195 million/year — and that is before accounting for the 80% property-tax rebate and 100% personal-property-tax relief. The headline revenue figure represents the County's share after exemptions, not the comparison against what would have been collected at standard rates.

8. Questions for MIDA at the Town Hall

The following questions are constructed to elicit specific, on-the-record answers. They are deliberately structured so that vague or evasive responses are themselves informative. Bring this list.

8.1 On regulatory authority and enforceable standards

16. Will the Stratos development agreement contain enforceable Power Usage Effectiveness (PUE) and Water Usage Effectiveness (WUE) maximums? If yes, what are the specific numerical caps and the audit / verification mechanism? If no, why not?
17. Will the development agreement require third-party annual reporting of total electricity consumption, total water consumption, and total greenhouse gas emissions, with public posting? If not, what mechanism will the public use to verify operating performance?
18. Has MIDA imposed any condition that would prevent the developer from seeking federal exemption from Clean Air Act standards (as Novva did)? If not, will MIDA add such a condition before final approval?
19. Once the project area is established, what land-use, water, or efficiency standards retains Box Elder County the legal authority to impose? Please cite the specific Utah Code provisions that preserve county authority.
20. Will MIDA require a financial decommissioning bond that covers full removal of generation infrastructure, IT equipment, and site reclamation if the project fails or tenants do not materialize?

8.2 On infrastructure feasibility

21. What firm transportation capacity has been contracted on the Ruby Pipeline for Phase 1 (3 GW) and full buildout (9 GW)? Please provide FERC docket references.
22. What is the FERC Section 7 timeline and capital cost for any necessary Ruby Pipeline lateral, looping, or compression expansion?
23. Has West GenCo or O'Leary Digital filed an Integrated Resource Plan or equivalent generation portfolio document with any state or federal agency? If so, can it be made public?
24. What is the projected combined-cycle thermal efficiency of the gas generation plant? What is the projected MLC and ELC under ASHRAE 90.4?
25. How many gas turbines, of what model and rated output, are planned for Phase 1?

8.3 On water

26. What is the total projected annual water consumption for Phase 1 and for full buildout, broken out by: (a) IT cooling, (b) steam-cycle / gas-plant cooling, (c) administrative, (d) landscaping, and (e) other?
27. How does the 1,900 acre-foot Bar H Ranch water rights application (13-4148) relate to the project's projected water needs? What additional water rights applications are anticipated?

28. Has the developer commissioned a hydrologic study of project-area groundwater pumping impacts on Locomotive Springs flow? If so, will it be released publicly? If not, why not?
29. Will the developer commit to a hydrologic monitoring program — with public reporting — to verify that pumping does not further degrade Locomotive Springs Waterfowl Management Area flows?
30. Will MIDA condition consent on a binding requirement that the project consume net-zero water from the Hansel Valley aquifer over a rolling five-year average?

8.4 On air quality

31. What is the projected annual emission rate of CO₂, NO_x, CO, VOCs, PM_{2.5}, and methane (as fugitive and combustion) at Phase 1 and full buildout?
32. What is the proposed BACT for NO_x control? Will SCR (selective catalytic reduction) be deployed on every turbine?
33. Will the development agreement prohibit the developer from seeking federal Clean Air Act exemptions of the kind Novva pursued?
34. Has Utah DAQ issued any Notice of Intent or draft Approval Order for project-area emission sources? If so, when does the public comment period open?

8.5 On finances and accountability

35. What is the foregone tax revenue compared to the standard 6% energy use tax rate, on an annual basis, at Phase 1 and full buildout?
36. What clawback provisions exist if the project under-delivers on jobs, capital investment, or tax revenue?
37. Who is the named hyperscaler customer for Phase 1? If none has signed, what is the contingency if no tenant materializes?
38. What is Box Elder County's projected cost for road maintenance, emergency services, and water/wastewater infrastructure attributable to the project? Will the developer pay an impact fee covering 100% of those costs?
39. The May 4, 2026 public comment meeting is scheduled with seven days' notice and no public release of the full development agreement, interlocal agreement, or project area plan. Will MIDA commit to releasing the full text of all three documents at least 30 days before any final consent vote, and will the County Commission hold a second public comment meeting after document release and before voting?

8.6 On process

40. Why was the project announced and advanced to consent vote on a three-week timeline, given the size of the development relative to its review window?

41. What public meetings, environmental assessments, and water-availability studies were performed BEFORE the development agreement was negotiated, and where can residents access them?
42. Will MIDA commit to releasing the full text of the Stratos development agreement, project area plan, and interlocal agreement at least 30 days before the County Commission's final consent vote?

8.7 On federal review and tribal consultation

43. The Box Elder County resolution states that the project area includes Hill Air Force Base land. What federal action involving that land has been or will be taken by the Department of the Air Force, and what NEPA, NHPA Section 106, and ESA Section 7 reviews are anticipated as a result?
44. Has the developer, MIDA, or the County formally consulted with the Northwestern Band of the Shoshone Nation regarding the Stratos project area? If so, what was the form, date, and outcome of the consultation? If not, when is consultation scheduled?
45. The Promontory area is documented in published archaeological literature as a significant cultural landscape, including the Promontory Caves complex (~1250-1350 CE Promontory Phase). What cultural-resource survey has been conducted of the project area, and by whom? Will the survey results be released publicly before consent?
46. On January 23, 2026 the U.S. Fish and Wildlife Service issued a positive 90-day finding on the petition to list the Wilson's phalarope as threatened under the ESA, with the decline of the Great Salt Lake cited as the central threat. How will MIDA, the County, and the developer treat this active federal listing review in their assessment of the project's water-extraction footprint?
47. Are any portions of the project area currently subject to BLM grazing leases, mineral leases, or rights-of-way? If so, what disposition or modification of those interests is anticipated, and which BLM field office is involved?
48. Will the developer commit, in writing, not to seek any federal categorical exclusion, expedited NEPA review, or alternative-arrangements waiver from the Council on Environmental Quality for the Stratos project, and not to support any state legislative effort to assign NEPA lead-agency authority to MIDA in future legislative sessions?

9. Likely Defenses and How to Counter Them

Project representatives, MIDA officials, and elected boosters of the development will deploy a predictable set of rhetorical defenses when public commenters raise the concerns documented in this briefing. The pattern is consistent across off-grid hyperscale data center proposals nationwide, with Utah-specific elaborations. The table below pairs each likely defense with the factual response and a follow-up question designed to make evasion visible.

This section is not exhaustive. It covers the dozen most likely deflections you should expect to encounter.

9.1 Quick reference: defenses by topic

Defense (likely)	Factual response	Follow-up question
THEY SAY "The 9 GW number is a long-term aspiration. Phase 1 is only 3 GW."	ACTUALLY The development agreement covers the entire 40,000-acre project area. Phase 1 alone requires ~30% of Ruby Pipeline mainline capacity. Land-use, water-rights, and gas-supply commitments at Phase 1 prefigure the buildout. Once Phase 1 commits, scaling resistance evaporates.	ASK BACK Show the contractual provision in the development agreement that prevents expansion past Phase 1 without separate County Commission consent. If none exists, the consent vote is for 9 GW.
THEY SAY "We have firm transportation capacity contracted on Ruby Pipeline."	ACTUALLY FERC tariff filings would document any firm capacity contracts. Ruby's existing capacity is largely committed to West Coast utilities. Any incremental capacity required would necessitate FERC Section 7 expansion (5-7 year process).	ASK BACK Provide the FERC docket number and capacity volume of any firm transportation contract held by O'Leary Digital, West GenCo, or any project affiliate.
THEY SAY "Pipeline capacity can be expanded with looping or compression upgrades."	ACTUALLY True in principle, but FERC certificate amendments take 3-5 years minimum, require open-season subscription, and involve their own NEPA review. None of this is described in MIDA project materials.	ASK BACK When was the open season for Ruby Pipeline expansion held? What was the certificated incremental capacity? Has FERC been formally notified of the project's requirements?
THEY SAY "We will deploy carbon capture and sequestration (CCS)."	ACTUALLY CCS at gigawatt scale does not exist commercially anywhere in the world. The largest operating CCS facility on a power plant	ASK BACK Name the CCS technology vendor, the percentage of CO ₂ captured, the geological sequestration site, and the

	captures roughly 1 Mt/year. The Stratos proposal would require 25-35 Mt/year of capture — a 25-35x increase in global capacity.	contracted timeline. Will CCS be operational at Phase 1 commissioning?
THEY SAY "We use closed-loop, air-cooled cooling. Water use will be minimal."	ACTUALLY Water-rights Application 13-4148 explicitly requests 1,900 ac-ft/year for "Power Plant and Data Center; Steam Generation." Air-cooled IT cooling does not eliminate water use for steam-cycle gas-plant heat rejection.	ASK BACK Reconcile the public messaging that this is an 'air-cooled, low-water' facility with the steam-generation water rights filing. Specify projected water consumption by use category.
THEY SAY "That water rights filing isn't necessarily for our project."	ACTUALLY Bar H Ranch is a landowner in the project area. The application is for industrial water for a power plant and data center in Hansel Valley. The geographic and use-case overlap with Stratos is direct.	ASK BACK Confirm or deny that Application 13-4148 supplies water to the Stratos project. If denied, what entity is the water for, and what is its relationship to MIDA / O'Leary Digital / West GenCo?
THEY SAY "Locomotive Springs decline has multiple causes — irrigation, drought, etc."	ACTUALLY True. Which is precisely why no new industrial groundwater pumping should be added to an already stressed system. Cumulative impact is the entire concern.	ASK BACK If the system is already stressed from existing causes, what makes it appropriate to add the largest new groundwater demand in the basin's history?
THEY SAY "We'll work with the State Engineer; voluntary monitoring will catch problems."	ACTUALLY The State Engineer allocates water-rights quantity but has no statutory authority to require efficiency, real-time monitoring, or curtailment after appropriation. Voluntary monitoring without binding curtailment triggers does not provide enforceable protection for downgradient users.	ASK BACK Will the development agreement contain enforceable, automatic curtailment triggers tied to documented Locomotive Springs flow or aquifer-drawdown thresholds — with the trigger threshold spelled out in writing?
THEY SAY "Without these tax incentives, the project goes elsewhere."	ACTUALLY This is a race-to-the-bottom argument. If the developer's leverage is geographic competition, the state is admitting it is bidding lowest. The choice not to participate in that race is also legitimate.	ASK BACK Provide specific competing proposals from other states. What incentive package was needed elsewhere? If terms are confidential, confirm the structural weakness of the negotiating position.
THEY SAY "This is a national security imperative — race with China for	ACTUALLY National security framing does not waive environmental	ASK BACK Show the Department of Defense or Air Force letter,

<p><i>AI dominance."</i></p>	<p>review, water-rights process, or air-quality permitting. Pentagon has not (publicly) requested this specific facility. AI compute can be sited in many locations.</p>	<p>contract, or strategic plan that designates this Box Elder facility as a national security asset. Where is the documented national security requirement specific to this site?</p>
<p>THEY SAY <i>"We will comply with all applicable Utah requirements."</i></p>	<p>ACTUALLY Utah has no statutory PUE ceiling, no WUE ceiling, no statewide data center water-use reporting law, and SB 132 (2025) explicitly exempts closed private generation systems from PSC rate regulation. The list of "applicable Utah requirements" specific to off-grid data centers is essentially empty.</p>	<p>ASK BACK List the specific Utah statutes, rules, and codes that contain enforceable performance standards for off-grid data center campuses. Be specific.</p>
<p>THEY SAY <i>"Modern data centers achieve very low PUE."</i></p>	<p>ACTUALLY PUE is a ratio, not an absolute. A 9 GW campus at PUE 1.1 still consumes 9.9 GW total energy. PUE does not address total absolute consumption, water use, or carbon intensity.</p>	<p>ASK BACK Will the development agreement contain enforceable absolute consumption caps — total annual electricity, water, and CO₂ — alongside any PUE target?</p>
<p>THEY SAY <i>"We're paying for our own infrastructure — no public cost."</i></p>	<p>ACTUALLY Off-grid generation costs are private; road impacts, emergency services, water-system planning, and air-quality compliance are public. Private generation does not eliminate public infrastructure costs.</p>	<p>ASK BACK Will the developer pay impact fees covering 100% of incremental county costs for road maintenance, emergency services, and water/wastewater capacity, with annual true-up?</p>
<p>THEY SAY <i>"We will complete all required environmental review."</i></p>	<p>ACTUALLY Required by whom? NEPA only triggers when a federal agency takes a federal action. The developer can structure the project to minimize federal touch points and thereby minimize NEPA exposure. Saying "all required" answers the question only if the categories of required review are specified.</p>	<p>ASK BACK List every federal review (NEPA, NHPA Section 106, ESA Section 7, CWA 404, FERC Section 7, EPA PSD, others) the project will undergo, the lead agency for each, and the public-comment opportunity for each. If a review is NOT planned, name it and explain why.</p>
<p>THEY SAY <i>"There is no federal action here; this is a state and private project."</i></p>	<p>ACTUALLY The Box Elder County resolution itself states the project area includes Hill Air Force Base land. Federal action involving that land triggers federal review.</p>	<p>ASK BACK Will MIDA, the developer, or the County commit, in writing, that they will not seek any federal categorical exclusion, expedited NEPA pathway, or future state</p>

	<p>MIDA's failed attempt in 2025 SB 316 to claim NEPA lead-agency authority for itself is direct evidence the state recognized federal review otherwise applies.</p>	<p>legislation assigning NEPA lead-agency authority to MIDA?</p>
<p>THEY SAY "Tribal consultation isn't required for this project."</p>	<p>ACTUALLY NHPA Section 106 attaches to federal undertakings affecting historic properties, including landscape-scale settings of cultural significance. Executive Order 13175 separately requires meaningful tribal consultation on federal actions with tribal implications. The Northwestern Band of the Shoshone Nation has documented ancestral occupation of the Promontory area, is headquartered in Brigham City, and has standing.</p>	<p>ASK BACK Has formal consultation with the Northwestern Band of the Shoshone Nation been initiated? If so, what was the form, date, and outcome? If not, when is it scheduled — before or after consent vote?</p>
<p>THEY SAY "Joule in Millard County is going fine; this is a proven model."</p>	<p>ACTUALLY Joule's conditional-use permit is still pending as of this briefing's date due to community opposition that emerged after initial zoning approval. Joule's air permit applications document NOx emissions intensity approximately 6.5× higher per MWh than Utah's combined-cycle Lake Side Power Plant. Stratos at 40,000 acres and 9 GW is approximately 10× larger than Joule by acreage and approximately 2× larger by announced generation capacity, so the Joule data should be read as one in-state reference point rather than a finished precedent.</p>	<p>ASK BACK Will Stratos commit, contractually, that its emissions intensity per MWh will not exceed Utah's existing combined-cycle gas plants — and that this commitment will be measured, audited, and made public annually?</p>

9.2 The meta-defenses to watch for

Beyond topic-specific arguments, expect three structural rhetorical moves:

- **The urgency frame.** "Time is of the essence — competitors are moving faster." Manufactured urgency is a tactical choice, not a fact. The public's interest is in process integrity, not the developer's deal timeline. Counter: the speed of approval should be governed by the depth of public review, not the developer's preferred schedule.

- **The credibility shield.** "Mr. Wonderful is a successful entrepreneur and TV personality." The Canadian Wonder Valley project (announced 2024) has had documented delays: no finalized land purchase, no provincial permits applied for, no formal Indigenous consultations as of 2025 reporting. Track record matters. Counter: "Past performance is the best available indicator of future performance."
- **The deferral frame.** "Those details will be worked out in subsequent agreements." Once the consent vote is given, the leverage to negotiate substantive terms collapses. The interlocal agreement is the negotiated instrument; subsequent agreements between the developer and individual county departments are administrative. Counter: "If a term is going to be enforceable later, it can be written down now."

The pattern to recognize

When a defender's response is a deflection rather than a substantive answer, document it. Take notes. The pattern of evasion across multiple questions is itself evidence — and is something the press, environmental groups, and litigation-track attorneys will care about. A meeting transcript showing systematic non-answers is a powerful artifact for the next phase of the campaign.

10. Recommended Actions and Public Asks

10.1 What Box Elder County should require before consent

If the County Commission proceeds to consent, the following minimum conditions should be written into the interlocal agreement as enforceable obligations, not aspirational language:

49. PUE cap of 1.3 or less (annualized), with third-party verification and public reporting.
50. WUE cap and absolute annual water-consumption ceiling, with public quarterly reporting.
51. Hydrologic monitoring of Hansel Valley aquifer and Locomotive Springs flow, with automatic curtailment triggers if degradation is observed.
52. Decommissioning bond equal to projected demolition and reclamation cost, escrowed before construction.
53. Prohibition on seeking federal Clean Air Act exemptions for project emission sources.
54. Phase-gated approvals: Phase 2+ buildout contingent on independent verification that Phase 1 has met all efficiency, water, and air-quality conditions.
55. Impact fees covering 100% of county infrastructure costs, with annual true-up.
56. Local hire and procurement preferences for construction and operations.
57. Public release of all environmental, hydrologic, and gas-supply contracts within 30 days of execution.
58. Sunset and re-consent: the project area plan should be reviewed and re-approved by the County Commission every five years.

10.2 What the state legislature should consider

59. Pass Rep. Koford's data center water reporting bill in the next general session, expanding it to cover all behind-the-meter generation as well as IT cooling.
60. Establish a statewide minimum PUE for new data centers ≥ 10 MW.
61. Require that any closed private generation system under SB 132 demonstrate carbon intensity no greater than the regulated utility's portfolio average.
62. Require water-supply demonstrations equivalent to Arizona's 100-year requirement for any data center in a closed groundwater basin.
63. Require MIDA to operate with elected (not appointed) representation in the affected county for any project area exceeding 1,000 acres of private land.

10.3 Immediate citizen actions

- **Attend the May 4 public-comment meeting** at 4:00 PM at the Brigham City Fairgrounds, Art Building. Today's hearing (Apr. 27) was held without taking public comment; May 4 is the next opportunity to put concerns on the record. Bring written remarks; ask for time at the mic; bring printed copies of the one-sheet handout and pocket guide companions to this briefing.

- **File a protest on water rights application 13-4148** before May 5, 2026 (the day after the public comment meeting). Protests can be filed electronically via the Utah Division of Water Rights, by mail (PO Box 146300, Salt Lake City, UT 84114-6300), or by hand delivery. A \$15 fee per application protested is required. Cite groundwater impact, Locomotive Springs flow, and lack of public hydrologic study.
- Request a copy of the full development agreement and project area plan from MIDA via GRAMA records request.
- Submit written comments to the Box Elder County Commission citing the unanswered questions in Section 7 and the likely defenses in Section 8.
- Contact the Utah Division of Air Quality to be added to the public notice list for any Approval Order or Title V permit related to project-area combustion sources.
- Coordinate with Utah Rivers Council, FRIENDS of Great Salt Lake, the Audubon Society, the Bear River Water Conservancy District, and Western Resource Advocates — all have prior involvement in Box Elder County water and habitat issues.

11. Sources and Citations

All factual claims in this briefing are drawn from primary or reputable secondary sources. Citations are organized by section.

11.1 Project facts

- Salt Lake Tribune: "'Hyperscale' data center project in Utah — expected to generate and consume more power than entire state — nears final approval" (April 25, 2026)
- Tom's Hardware: "Kevin O'Leary's 9 Gigawatt Utah data center campus approved" (April 26, 2026)
- Deseret News: "Utah close to deal with 'Shark Tank' star on massive data center project" (April 24, 2026)
- KPCW: "MIDA, 'Shark Tank' Kevin O'Leary announce new data center project area" (April 24, 2026)
- Converge Digest: "Utah Approves 9 GW Wonder Valley AI Campus With Off-Grid Power Model" (April 26, 2026)
- KSL.com: "Utah, Box Elder County officials mull plan to spur energy production, data center development" (April 24, 2026)
- Citizen Portal AI summary of Box Elder County Commission meeting (April 22, 2026)
- Data Center Dynamics: "Shark Tank star Kevin O'Leary plots 7.5GW 'Wonder Valley' data center campus in Utah" (March 2026)

11.2 Statutory and regulatory citations

- Utah Code Title 63H, Chapter 1 — Military Installation Development Authority Act
- Utah Code 63H-1-102, 63H-1-201, 63H-1-204, 63H-1-205, 63H-1-302, 63H-1-401, 63H-1-502
- Utah SB 132 (2025) — Electric Utility Amendments, Sen. Sandall / Rep. Jack, effective May 7, 2025 (le.utah.gov/~2025/bills/static/SB0132.html)
- Utah Code Title 73 — Water Rights
- Utah Energy Code 2021 (based on IECC 2021), Chapter 4 [CE], Section C403.1.2 — data center carve-out
- ASHRAE 90.4-2019/2022 — Energy Standard for Data Centers
- ASHRAE 90.1 — Energy Standard for Buildings (referenced for envelope, lighting)
- Utah Administrative Code R307 — Air Quality Rules
- Utah Code 15A-3 — State Construction Code adoption

11.3 Pipeline and infrastructure

- Federal Register, Vol. 74, No. 31 (February 17, 2009) — Ruby Pipeline, L.L.C., Notice of Application (FERC Docket CP09-54-000)

- FERC Certificate of Public Convenience and Necessity — Ruby Pipeline (2010)

11.4 Water resources

- Utah Division of Water Rights — Application 13-4148 (a54385), Bar H Ranch, Inc., 1,900 acre-feet, Salt Wells Spring Stream, Hansel Valley, Industrial: Data Center / Steam Generation
- Utah Division of Water Rights — Area 29 (Bear River / Box Elder County) appropriation policy
- Utah Geological Survey & Utah Division of Water Rights — Locomotive Springs study (2008): "Locomotive Springs losing steam," Deseret News (Nov. 26, 2008)
- USGS Hydrologic Reconnaissance of Hansel Valley and Northern Rozel Flat (Publication 70178877)
- McCullough, R. A. (1951): Ecological Survey of the Muskrat at Locomotive Springs — establishes 12,000-acre refuge baseline
- Aspen Policy Academy: "Great Salt Lake Basin Data Center Water Use" (2024)

11.5 Air quality

- Utah DEQ Division of Air Quality — Air Quality Permitting and Fees pages
- EPA Green Book — Utah Nonattainment/Maintenance Status (current as of February 28, 2026)
- Salt Lake Tribune: "Feds take Wasatch Front off national dirty air list for inversion smog" (November 20, 2025)
- Grist: "To power Utah's data center boom, companies are turning to fossil fuels" (March 12, 2026)
- Grist: "These data center developers asked Trump for an exemption from pollution rules" (February 27, 2026) — Novva precedent
- Worth: "Utah's Largest Data Center Faces Power Supply Issues" (March 2, 2026)
- NREL (2000): "Life Cycle Assessment of a Natural Gas Combined Cycle Plant" (NREL/TP-570-27715)
- UNECE (2021): Carbon Neutrality in the UNECE Region — Integrated Life-cycle Assessment of Electricity Sources
- IPCC AR5 Annex 3 (2014) — lifecycle emissions factors

11.6 Tax structure and economic context

- MIDA Ordinance 2025-01 — Utah National Guard Project Area Municipal Energy Sales and Use Tax (June 24, 2025) — energy tax rate baseline
- Deseret News: "Growing data center demand faces power and water challenges" (April 15, 2026) — Kem C. Gardner Policy Institute jobs analysis
- Utah Foundation: Reports on Utah air quality history
- Pew Research Center: "What we know about energy use at U.S. data centers amid the AI boom" (October 2025)

- MultiState: "State Data Center Laws Challenge Federal AI Infrastructure Push" (April 14, 2026)

11.7 ASHRAE 90.4 technical references

- Consulting-Specifying Engineer: "The development of ASHRAE 90.4: Energy Standard for Data Centers"
- Consulting-Specifying Engineer: "What ASHRAE 90.4 does for data center energy efficiency" (April 2025)
- Data Center Frontier: "Examining the Proposed ASHRAE 90.4 Standard"
- Data Center Knowledge: "ASHRAE 90.4: Why This Data Center Standard Matters" (June 2024)
- Data Center Dynamics: "ASHRAE updates data center energy standard 90.4" (March 2026)

11.8 Federal pathways, tribal consultation, and species protection

- Save Our Canyons: "2025 Legislative Session Recap" — documents the SB 316 third-substitute removal of MIDA NEPA lead-agency provision after ~2,000 public messages (saveourcanyons.org)
- Northwestern Band of the Shoshone Nation, official history page (nwbsoshone.com/about/history)
- Utah Division of Indian Affairs: "Northwestern Band of Shoshone" tribal profile (indian.utah.gov)
- Northwestern Band of the Shoshone Nation v. Wooten, 9th Cir. 2023 (treaty hunting rights)
- Mae Parry, "The Northwestern Shoshone" — Issuu / Utah Division of State History (issuu.com/utah10) — documents the area in the vicinity of Promontory and Corinne as ancestral wintering ground
- Natural History Museum of Utah: "The Promontory Culture: Subarctic Canadian People Living in Utah Caves" (Aug. 24, 2016) — documents Ives & Janetski excavations 2011-2014
- Cultural Resources Overview, Golden Spike NHS / Promontory area, NPS History (npshistory.com/publications/gosp/crr-1034.pdf) — documents Promontory Phase, Numic Period, Northwestern Shoshone ancestry
- Center for Biological Diversity press release: "Wilson's Phalarope Advances Toward Endangered Species Protection" (January 23, 2026) — positive 90-day finding by USFWS
- Salt Lake Tribune: "Great Salt Lake phalaropes one step closer to federal endangered species protections" (January 24, 2026)
- S.J. Quinney College of Law: "Understanding the petition to list the Wilson's phalarope" (March 28, 2024)
- USGS Technical Publication 45 (Baker, 1974): "Water Resources of the Curlew Valley Drainage Basin, Utah and Idaho" — federal study commissioned to evaluate Locomotive Springs flow and groundwater pumping

11.9 Joule Capital Partners precedent and Utah construction-code amendments

- Trellis: "Utah data center will solve water, power scarcity in a novel way" (December 2-9, 2025) — documents Joule's 4,380 tons/yr air pollution, 1,380 tons NOx, 0.15 kg/MWh NOx intensity, 6.5x Lake Side comparison
- Grist: "To power Utah's data center boom, companies are turning to fossil fuels" (March 12, 2026) — 6 buildings × 69 Caterpillar G3520K generators each (414 generators total)
- Data Center Frontier: "Utah's 4 GW AI Campus Tests the Limits of Speed-to-Power" (February 18, 2026) — Joule 10,000 acre-feet groundwater rights
- KSL.com: "World's largest data center campus could be coming to central Utah" (August 14, 2025) — Sen. Nate Blouin oversight critique; both Joule and Creekstone projects documented
- Utah Code §15A-3-701(1) — statewide IECC amendment deleting Section C405.11 automatic receptacle control requirement
- Utah Energy Code training materials (utahenergycode.com/utah_energy_education) — confirms C405.11 deletion as "the only amendment to the commercial provisions"
- Utah Code §54-2-1 and §54-2-201 — public utility definition exclusions: eligible customer self-use, independent energy producer, contiguous property exemptions
- Utah Code §15A-2-103 — State Construction Code adoption (2021 IECC, 2021 IBC, etc.) and anti-stringency framework limiting local code amendments

11.10 Great Salt Lake state policy framework

- Utah House of Representatives: "Utah's 2026 Great Salt Lake Laws: Water Rights, US Magnesium, and Federal Funds" (March 2026) — documents \$30M US Magnesium acquisition (144,000 ac-ft retired) and Compass Minerals 200,000 ac-ft donation
- Great Salt Lake Strategic Plan (greatsaltlake.utah.gov) — January 2024
- Box Elder County Resolution (April 22-27, 2026) — references inclusion of "Hill Air Force Base land in unincorporated portions of the county" as part of the Stratos project area, per KSL reporting (April 24, 2026)

Document compiled April 27, 2026 from public sources for educational and public-comment purposes. Verify all figures against primary sources before quoting in formal proceedings.