

NORTHERN UTAH

PREMIUM MEAT & FOOD SECURITY

ENTERPRISE

*An Integrated Meat Processing, Packaging, and Emergency Food
Security Business Plan*

Box Elder County • Tremonton, Utah

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Executive Summary

Northern Utah Premium Meat & Food Security Enterprise is a vertically integrated facility located in Box Elder County, Tremonton area — built at the ideal convergence of cattle country, accessible infrastructure, and a region with deep agricultural roots. The facility will do what large national processors cannot: be close to the animals, close to the farms, and invested in the quality of every animal that passes through.

This is not just a processing facility. It is a full food security system — from the feedlot to the freeze dryer to the emergency food kit that can be shipped anywhere in the world. The facility integrates three business lines under one roof:

- Premium Meat Processing and Packaging: Slaughter, butchering, and retail-ready packaging of beef and other livestock from regional Box Elder and surrounding county farms.
- Freeze-Dried Emergency Food Production: Large-scale freeze drying of beef, vegetables, and fruit into vacuum-sealed, nutrient-preserving meal portions packaged in 5 lb+ family emergency kits.
- Organic Composite Emergency Kit Packaging: The outer packaging itself is made from organic fiber composite material — capable of holding water for the first meals, and including utensils, matches, and fire-starting material inside a single self-contained unit.

URGENT FUNDING OPPORTUNITY: *USDA MPPEP Phase 4 grants are accepting applications through August 7, 2026 — awarding up to \$2 million specifically to support the American beef industry in Box Elder County's region. This facility qualifies directly. Application must be submitted through Grants.gov before the deadline.*

The Tremonton area is ideal for this facility: it sits within range of a large concentration of cattle operations across Box Elder, Cache, Weber, and Rich Counties. Northern Utah produces more beef cattle per capita than most of the Mountain West. The animals are already here. The feed is already here. The workforce is already here. What is missing is a state-of-the-art facility worthy of the region's agricultural output — and the capacity to turn that output into the highest-quality, longest-lasting food supply in the country.

Section 1: The Problem We Solve

1.1 The Meat Processing Gap in Northern Utah

Northern Utah cattle producers face a supply chain problem that costs them real money every single year. The nearest large-scale USDA-inspected processing facilities are hours away. Producers either pay high transportation costs to distant plants, wait weeks or months for processing slots during peak season, or settle for lower prices because they lack leverage with distant processors.

The four major national beef processors — JBS, Tyson, Cargill, and National Beef — control approximately 85% of U.S. beef processing. This concentration means regional farmers have almost no pricing power and no alternative. When those plants slow down or shut down (as happened dramatically in 2020), the entire regional cattle market collapses.

A local, premium, USDA-inspected facility in Box Elder County solves all of this simultaneously: shorter transport, faster turnaround, premium pricing for premium product, and supply chain resilience for the entire northern Utah agricultural community.

1.2 The Emergency Food Security Gap

The United States has a serious emergency food preparedness problem. FEMA recommends every household maintain a minimum two-week food supply. Most households have less than three days. When natural disasters, supply chain disruptions, or regional emergencies occur — earthquakes, floods, wildfires, grid failures — the food supply for affected communities disappears within days.

Current commercial emergency food products are heavily processed, nutrition-depleted, chemically preserved, and packaged in containers that offer no functional utility in an actual emergency. A freeze-dried beef and vegetable meal kit that retains 97% of its original nutrients, lasts 25+ years, rehydrates with just water, and arrives in a package that can hold that water and start a fire is a fundamentally different and better product than anything currently on the market.

The global emergency food market is growing rapidly. FEMA, USAID, the UN World Food Programme, state emergency management agencies, military commissaries, and individual families are all active buyers. Northern Utah is perfectly positioned to be the domestic production hub for this market.

Section 2: The Facility

2.1 Location and Site

Box Elder County, Tremonton area. Tremonton sits at the intersection of I-84 and U.S. Highway 30, providing direct freight access to all western markets. The area has agricultural zoning, available industrial land, rail access nearby, and existing water and power infrastructure. It is within 60 miles of Cache Valley (major dairy and beef), Rich County (high-density cattle operations), and Weber County (population center for retail distribution).

The facility will occupy approximately 15–25 acres, with buildings totaling 40,000–80,000 square feet depending on phased build-out, including the processing plant, cold storage, freeze-drying wing, packaging hall, and administrative offices.

2.2 Facility Components

Feedlot Operations

A managed feedlot adjacent to the processing facility holds 200–1,000 head of cattle in rotating capacity, receiving animals from regional producers. The feedlot provides holding, health screening, and humane conditioning before processing. This reduces transport stress, improves meat quality, and allows the facility to manage throughput efficiently.

- Capacity: 200–1,000 head holding
- Sourcing: Box Elder, Cache, Rich, Weber, and Davis County producers
- Animal welfare: Certified humane handling protocols, low-stress handling design (Temple Grandin methodology)
- Feed: Northern Utah alfalfa, grain, and range-fed finishing diets to produce premium quality grades

Slaughter and Processing

A USDA-inspected slaughter line with full federal inspection coverage, enabling the facility to sell into interstate commerce, export markets, and federal procurement programs. The slaughter line is designed for beef as the primary species, with secondary capability for sheep, hogs, and specialty livestock.

- Target throughput: 50–200 head per day (Phase 1), scaling to 500+ head per day (Phase 3)
- USDA federal inspection: Required for interstate and export sales; applied for at facility planning stage
- Humane handling certification: USDA Process Verified or equivalent animal welfare certification
- Kill floor equipment: Stunning, bleeding, hide removal, evisceration, splitting, inspection stations
- Chilling: Rapid blast chill rooms bringing carcasses to 34°F within 24 hours

Butchering and Custom Cut

A premium fabrication floor where trained butchers process carcasses into primal, sub-primal, and retail-ready cuts. The facility will offer both commodity cuts for wholesale and custom cutting services for regional producers who want to sell direct to consumers.

- Fabrication floor: Full primal breakdown, portion cutting, grinding, trim management
- Custom processing: Producer-owned custom cut, wrap, and freeze services for direct-marketing farmers
- Value-added: Sausage, jerky, cured meats, bone broth production as secondary revenue
- Vacuum packaging: Retail-ready cryovac packaging for grocery, restaurant, and direct-to-consumer sales

Cold Storage

Large-scale refrigerated and frozen storage for carcass hanging, product holding, and distribution staging. Proper cold chain management is the single most important factor in premium beef quality. This facility will be built around cold chain excellence.

- Carcass coolers: 34°F, minimum 48-hour dry aging capability before fabrication
- Dry aging rooms: Premium 14–28 day dry aging for high-value cuts
- Product freezers: –10°F blast freeze and long-term storage for processed product
- Staging: Temperature-controlled loading docks for distribution trucks

Section 3: Freeze-Dried Emergency Food Program

3.1 Why Freeze Drying — The Science

Freeze drying (lyophilization) is the only food preservation method that retains up to 97% of the food's original nutritional content while achieving a 25+ year shelf life. Every other method — canning, heat dehydration, vacuum sealing without freeze drying — destroys significantly more nutrition through heat and chemical exposure.

The process: food is frozen solid, then placed in a vacuum chamber where the frozen water sublimates directly from solid ice to vapor without passing through a liquid state. The result is food that retains its original cellular structure, color, flavor, and nutritional profile — but with virtually no moisture content, making it shelf-stable for decades and lightweight for transport.

- 97% nutrient retention vs. approximately 40–60% for heat dehydration
- 25+ year shelf life when vacuum sealed in appropriate packaging
- Rehydrates completely with water — texture, flavor, and nutrition restored in minutes
- 60–90% weight reduction — dramatically lower shipping costs for emergency distribution
- No preservatives, no chemicals, no artificial additives required

Utah connection: *Harvest Right, the leading commercial freeze dryer manufacturer in the United States, is headquartered in the Salt Lake City, Utah area — making equipment sourcing, service, and local partnership straightforward for a Box Elder County facility.*

3.2 The Emergency Food Kit

The Northern Utah Emergency Food Kit is designed around one principle: give a person or family everything they need to eat nutritious, real food for one week in any emergency scenario, without requiring electricity, refrigeration, or outside supply.

Food Contents (5 lb minimum per kit)

- Freeze-dried beef: 10–15% of kit weight — complete protein, high caloric density, maximum nutrition
- Freeze-dried vegetables: Potatoes, carrots, peas, corn, and greens providing vitamins and minerals
- Freeze-dried fruit: Berries, apples, or citrus providing Vitamin C and natural sugar energy
- Grain component: Rice, oats, or similar shelf-stable grain for carbohydrate base
- Seasoning packet: Salt, basic seasonings, broth powder for palatability
- All ingredients vacuum sealed in individual meal-size mylar pouches for single distribution

The Kit Packaging — The Innovation

The outer box packaging is built from organic fiber composite material — hemp fiber impregnated with a water-resistant matrix — making the package itself functional in an emergency, not just a container to discard. The packaging is engineered to:

- **Hold water:** The interior of the box is sealed to hold enough water for the first 2–3 meals of rehydration — eliminating the need for a separate water container in the critical first hours of an emergency
- **Include fire-starting material:** Compressed fire-starting blocks or treated fire cord woven into the package lining provide sufficient fuel for at least 2 meals of cooking
- **Include utensils:** A spork, small folding knife, and folded foil cooking vessel are packed inside — everything needed to prepare and eat the food with no other equipment
- **Include matches:** Waterproof matches in a sealed compartment
- **Be biodegradable:** The organic fiber composite decomposes naturally, leaving no synthetic waste in an emergency environment

This packaging concept is unique in the emergency food market. No competitor offers a container that doubles as a water vessel, fire-starting kit, and utensil pack. The organic composite box is itself a product — patentable, premium, and aligned with the growing market for sustainable emergency preparedness.

3.3 Freeze Drying Equipment and Scale

The facility will install a bank of commercial-grade freeze dryers, targeting 10–20% of total beef production for freeze-dried conversion, plus dedicated capacity for fruits and vegetables sourced from northern Utah farms.

- **Phase 1:** 4–8 commercial freeze dryers (Harvest Right HRC100 Pro class or equivalent), each processing 65–100 lbs per batch, running continuous cycles
- **Phase 2:** Industrial-scale freeze drying line, 500–1,000 lbs per batch capacity
- **Production target:** 10,000–100,000 emergency kits per month at scale
- **Packaging line:** Vacuum sealing station, mylar pouch sealing, composite box assembly, case packing

3.4 Markets for Emergency Food Kits

- **FEMA and state emergency management agencies:** Federal procurement for disaster stockpiles
- **U.S. military commissaries and MRE contractors:** Freeze-dried beef for military rations
- **USAID and international relief organizations:** Export-ready kits for global disaster response
- **Direct consumer e-commerce:** Growing prepper/food security consumer market
- **Retail:** Outdoor/sporting retailers (REI, Cabela's, Bass Pro), grocery emergency aisles
- **Corporate emergency preparedness programs:** Businesses stockpiling for employee safety
- **Foreign government procurement:** Export to nations building national emergency food reserves

Section 4: Why This Facility Wins

4.1 Location Advantages

- Proximity to animals: Box Elder and surrounding counties contain tens of thousands of beef cattle. Transportation stress is the primary cause of bruising and quality degradation in beef. A local facility produces better meat.
- Infrastructure: I-84/US-30 interchange provides direct freight access to Pacific, Mountain, and Central markets. Rail access nearby for bulk grain and commodity freight.
- Workforce: Northern Utah agricultural communities have generational knowledge of livestock handling and meat cutting. The workforce exists and is skilled.
- Local feed supply: Cache Valley alfalfa and grain operations provide premium finishing feed within 60 miles.

4.2 Quality Advantages

- Humane handling: Temple Grandin-designed low-stress handling systems produce measurably better meat quality through reduced cortisol and improved blood letting.
- USDA federal inspection: Full interstate and export commerce eligibility, commanding premium pricing over state-inspected or custom-exempt facilities.
- Dry aging capability: On-site 14–28 day dry aging rooms for premium cut production — a service unavailable at volume-driven national plants.
- Small batch control: Unlike national plants processing thousands of head per day with automated throughput, this facility can manage quality at every step.
- Traceability: Individual lot tracking from farm to package, enabling premium ‘Know Your Farmer’ labeling and direct marketing support for regional producers.

4.3 Product Differentiation

- The only emergency food kit on the market with organic composite packaging that functions as a water vessel and fire kit.
- Local, traceable, Northern Utah beef — not commodity blended from hundreds of sources.
- 25-year shelf life at 97% nutritional retention — the highest quality emergency protein available commercially.
- USDA-inspected beef in every kit — federal safety certification that commodity emergency food producers often lack.

Section 5: Jobs, Community, and Economic Impact

This facility is designed to be the economic anchor for Box Elder County's agricultural community — not an extraction operation that takes value out of the region, but one that multiplies value from within it.

5.1 Direct Employment

- Phase 1 (Year 1–2): 40–70 direct full-time jobs — slaughter floor, fabrication, cold storage, freeze drying, packaging, quality control, administration
- Phase 2 (Year 3–5): 100–200 jobs as freeze-drying and emergency kit production scales
- Phase 3 (Year 5+): 200–400+ jobs at full production scale
- Wages: Processing and skilled butcher positions start at \$18–25/hour; certified USDA inspectors, cold chain managers, and production supervisors at \$35–60/hour

5.2 Indirect Economic Impact

- Premium pricing for regional producers: Direct contracts with Box Elder and surrounding county cattle ranchers at prices above commodity markets, because quality is sourced and verified locally.
- Local feed procurement: Corn, alfalfa, and grain purchased from northern Utah farms for feedlot operations.
- Transportation and logistics: Local trucking, refrigerated transport, and logistics businesses grow with facility volume.
- Veterinary and agricultural services: Increased demand for herd health, livestock handling, and feedlot management services throughout the region.
- Retail and foodservice: Premium local beef products available to northern Utah restaurants, grocery stores, and food service operations that currently have no local source.

5.3 Food Security Mission

Every emergency food kit produced at this facility serves a purpose beyond profit. It represents the P.L.U.R.R. philosophy in physical form: Peace (prepared communities are stable communities), Love (feeding people in crisis is an act of love), Unity (a regional food supply protects the whole region together), Respect (real nutrition, not chemical-laden shelf filler), and Responsibility (building the infrastructure our communities depend on before disaster strikes).

Section 6: Capital Requirements and Funding Strategy

6.1 Phase 1 Capital Needs (Facility Build-Out)

- Land acquisition (15–25 acres, Tremonton area): \$500,000–\$1.5M
- Facility construction (processing plant, cold storage, freeze-drying wing): \$3M–\$6M
- Slaughter line equipment (stunning, bleed, hide, evisceration, inspection stations): \$750,000–\$1.5M
- Refrigeration and cold storage systems: \$400,000–\$800,000
- Fabrication and packaging equipment: \$300,000–\$600,000
- Freeze dryers (Phase 1 bank, 4–8 commercial units): \$200,000–\$500,000
- Packaging line (vacuum sealing, mylar, composite box assembly): \$150,000–\$350,000
- USDA inspection setup, compliance, and certification: \$100,000–\$200,000
- Working capital (6 months operating runway): \$500,000–\$1M

Total Phase 1 Capital Required: \$5.9M – \$12.45M depending on build scale and land acquisition terms. A phased approach beginning with a smaller processing footprint (50 head/day) and expanding to full capacity reduces initial capital requirement significantly.

6.2 Funding Strategy

USDA MPPEP Phase 4 Grant — APPLY IMMEDIATELY

The USDA Meat and Poultry Processing Expansion Program Phase 4 is accepting applications through August 7, 2026. This program provides grants of up to \$2 million specifically to support the American beef industry. The facility must primarily process cattle to qualify — which this facility does. This is a direct, non-dilutive grant that requires a 50% cost match. Application submitted through Grants.gov. This is the most urgent capital action item in this entire business plan.

USDA Rural Business Development Grants

Box Elder County qualifies as a rural area for USDA Rural Development programs. Equipment, training, and technical assistance eligible for grant funding through local county and nonprofit applicants.

USDA Farm Service Agency (FSA) Loans

FSA provides direct and guaranteed loans for farm and agricultural business infrastructure. A processing facility serving regional producers qualifies for guaranteed loan programs that reduce lender risk and improve financing terms.

Business & Industry (B&I) Guaranteed Loan Program

USDA Rural Development's flagship B&I program improves economic health of rural communities through loan guarantees. Covers construction, equipment, and working capital for rural businesses. No upper limit on loan size for qualified projects.

Private Investment and Strategic Partners

Regional cattle producers who benefit from the facility are natural investors and offtake contract partners simultaneously. A producer-owned cooperative structure or preferred equity offering to regional ranchers aligns interests and provides early committed volume with facility investment.

Section 7: Revenue Projections

Year 1 — Launch Phase (50 head/day capacity)

- Beef processing fees (50 head/day × 250 operating days): \$3M–5M annually
- Custom cut and wrap services for direct-marketing producers: \$300K–\$600K
- Retail packaged beef (local grocery, restaurant, direct): \$500K–1M
- Freeze-dried emergency kits (initial production, 1,000–5,000 kits/month): \$200K–\$600K
- Value-added products (sausage, jerky, bone broth): \$150K–\$300K

Year 1 Estimated Revenue: \$4.15M – \$7.5M

Year 3 — Scale Phase (200 head/day, emergency kit production at scale)

- Processing fees and wholesale beef: \$12M–20M
- Freeze-dried emergency kits (20,000–50,000/month): \$5M–15M
- Government and military procurement (FEMA, DoD, USAID): \$2M–10M
- Export sales (international emergency reserves): \$1M–5M

Year 3 Estimated Revenue: \$20M – \$50M

Year 5 — Full Operations

At full 500 head/day processing capacity with the emergency food program at scale and government procurement relationships established, annual revenue of \$75M–\$150M is achievable. This places the facility among the largest regional processing operations in the Mountain West while remaining locally owned and community-serving.

Section 8: Immediate Next Steps

This Week

- Submit USDA MPPEP Phase 4 grant application at Grants.gov before August 7, 2026 deadline — this is the single most time-critical action item.
- Contact USDA Rural Development Utah State Office regarding B&I Guaranteed Loan eligibility and NRCS Regenerative Pilot Program compatibility.
- Identify and contact 10–20 regional cattle producers in Box Elder and Cache Counties about processing commitment letters — these letters dramatically strengthen grant and loan applications.
- Engage Box Elder County Economic Development office regarding enterprise zone incentives, site selection assistance, and local government support.

Month 1-3

- Commission a feasibility study and site assessment for 2–3 candidate properties in the Tremonton area.
- Engage a USDA-approved architect and food processing engineer to begin facility design for USDA inspection compliance.
- File preliminary application with USDA Food Safety Inspection Service (FSIS) for federal inspection designation.
- Contact Harvest Right (Salt Lake City) regarding commercial freeze dryer pricing, volume discounts, and installation support for a Box Elder County facility.
- Begin producer outreach and secure letters of intent for processing volume from regional ranchers.

Month 3-6

- Close on site land and begin permitting process.
- Engage general contractor with agricultural processing facility experience.
- Secure primary financing stack: MPPEP grant + FSA loan + regional bank or investor equity.
- File provisional patent application on organic composite emergency kit packaging design.
- Begin USDA federal inspection facility design review process.