



2019 LONG-RANGE PLAN

UAF MATANUSKA EXPERIMENT
FARM & EXTENSION CENTER

University of Alaska Fairbanks

SCHOOL OF NATURAL RESOURCES AND EXTENSION
AGRICULTURAL AND FORESTRY EXPERIMENT STATION

University of Alaska Fairbanks, Matanuska Experiment Farm & Extension Center
Long-Range Plan. 2019

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Farm & Extension Center, for her diligent work while she was involved in the
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the creation of this long range plan. Throughout Jim's many years of service to
the MEFEC and UAF, he has supported the farm's agricultural research component,
served as interim farm director multiple times, and has been a strong advocate
for the farm and its programs. Jim's historical knowledge of the farm proved
invaluable in the creation of this document.



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BETTISWORTH NORTH

TABLE OF CONTENTS

INTRODUCTION	3
CHANCELLOR'S INTRODUCTION	3
INTRODUCTION	4
HISTORICAL FOUNDATION	4
MEFEC CHALLENGES	4
MEFEC VISION	5
ASSETS	6
LOCATION	7
FACILITIES	8
PROGRAMMATIC	8
EXISTING CONDITIONS: FACILITIES INVENTORY MAP	9
MEFEC PROPERTY MAP AND TRAILS	10
FUTURE VISION	12
MEFEC LONG-RANGE PLAN OBJECTIVES	13
IMPLEMENTATION	13
MEFEC IMPLEMENTATION STRATEGY: SHORT-TERM ACTION ITEMS	14
SHORT-TERM ACTION ITEMS: CORE FACILITIES MAP	15
MEFEC IMPLEMENTATION STRATEGY: SHORT-TERM ACTION ITEMS (CONTINUED)	16
MEFEC IMPLEMENTATION STRATEGY: MID-TERM ACTION ITEMS	18
MID-TERM ACTION ITEMS: CORE FACILITIES MAP	19
MEFEC IMPLEMENTATION STRATEGY: LONG-TERM ACTION ITEMS	20
LONG-TERM ACTION ITEMS: CORE FACILITIES MAP	21
ONGOING PLANS	22
CONCLUSION	22



INTRODUCTION

CHANCELLOR'S INTRODUCTION

Thank you for taking time to view the long-range plan for the UAF Matanuska Experiment Farm and Extension Center.

The Matanuska Experiment Farm has been a hub for research in Alaska for more than 100 years. The Matanuska Experiment Farm has served as a center of research, housing many faculty scientists and technicians. In the past the work of those individuals was devoted to research in traditional plant and animal agriculture and natural resources. While the MEFEC has a long history of serving the agricultural and natural resource fields, more recently it has become a focal point as the home for Extension in the Mat-Su and the Copper River Valleys. Located in the middle of the largest and fastest growing population centers in our state, the future of the UAF Matanuska Experiment Farm and Extension Center is dependent upon meeting the future with flexibility and responsiveness to the changing needs of the state of Alaska.

The plan put forth here involves many activities that are already in practice, while also providing an optimistic look at future possibilities so that UAF can maximize benefit to citizens of Alaska by fully developing the Matanuska Experiment Farm and Extension Center to the greatest benefit of all Alaskans.

Daniel M. White
Chancellor

Looking east with the farm property and Johnson Lake in the foreground and the Chugach Mountains in the background.

INTRODUCTION

The University of Alaska Fairbanks (UAF) Matanuska Experiment Farm and Extension Center (MEFEC) is an extremely valuable asset of Alaska's Land Grant University. Located in the heart of the Matanuska-Susitna (Mat-Su) Borough, the MEFEC acts as UAF's touchstone to the fastest growing population center in Alaska, and provides an established home in Southcentral Alaska for UAF to fulfill its tripartite mission of teaching, research, and outreach to the State of Alaska.

The MEFEC is a working farm, able to support UAF researchers and other external partners by providing land, facilities, and technical expertise for agricultural and herbivore studies. The MEFEC supports UAF research programs throughout the state by supplying cattle to the UAF Veterinary Medicine Program, and hay for the UAF Reindeer Research program and R.G. White Large Animal Research Station (LARS). The MEFEC supports other state programs by supplying hay to organizations such as the Alaska Department of Fish and Game (ADF&G) Ungulate Nutritional Studies Program and the Alaska Wildlife Conservation Center (AWCC) component of the ADF&G Wood Bison Reintroduction Program.

The MEFEC is home to the Mat-Su/Copper River Cooperative Extension Service and the statewide office for Alaska's National Future Farmers of America Association (FFA). An array of community outreach programs are offered at the MEFEC including best agricultural practices, sustainable energy concepts, home economics, human nutrition, and healthy lifestyles. The MEFEC plays an integral role in the community's youth development 4-H and FFA programs by providing farm resources, and a location for club meetings, leadership development programs, and educational events. The MEFEC also collaborates with the Alaska Pacific University on the Alaska Tilth project to educate the local community on food security best practices and nutrition.

HISTORICAL FOUNDATION

Formal pursuit of agricultural research in Alaska began in 1898 when the federal government initiated the establishment of several agricultural research stations located throughout the territory. In 1915,

the USDA identified land for development of an agriculture research station near the junction of the main line of the railway and the branch line leading to the Matanuska coalfields. With the consent of the Alaska Engineering Commission, two parcels of land with a total acreage of roughly 900 acres were selected. The Matanuska Experiment Station officially came into existence in 1917 when Dr. Milton Snodgrass, then the superintendent of the Kodiak Experiment Station for the U.S. Department of Agriculture, established the Matanuska Experiment Station. Concurrently, Territorial Governor John Strong accepted the federal land grant that led to the establishment of the Alaska School of Agricultural and Mines, now the University of Alaska Fairbanks. In 1932, the federal government transferred the entire Matanuska Experiment Station to the college.

Work on the farm began in earnest in 1917, and by August of that year the Superintendent's house, one of the first houses in the Mat-Su Valley to be built with dimensional lumber, was completed. The farm played a key role in the development of agricultural activity and research in the Mat-Su, especially in the development of crop varieties specifically bred for Alaska conditions. Since the USDA Agricultural Research Service (ARS) withdrew from Alaska in 2010, the MEFEC's emphasis has been more heavily weighted on public outreach. The Matanuska Experiment Station was renamed as the Matanuska Experiment Farm and Extension Center in 2014 when the Mat-Su/Copper River Cooperative Extension District moved to the Matanuska Experiment Farm in order to meet the diverse needs of the Mat-Su Valley rural sector, as well as its growing urban population, through integration of research efforts and Cooperative Extension programming.

MEFEC CHALLENGES

The MEFEC has a solid, 100-year, foundation of agricultural research and development and has been a leader in Alaskan agricultural research throughout this time. The MEFEC has stagnated because, until recently, it continued to adhere to past principles of agricultural norms while the needs of Alaskans continued to change. This became more obvious with the departure of the USDA ARS from Alaska in 2010. The

USDA ARS was the financial support for most agricultural research in Alaska, and their leaving has required adaptations and new thinking about agriculture across the state. The MEFEC is actively evolving to respond more effectively to the needs of the local community and the people of Alaska, while still promoting applicable agricultural and natural resources research.

With the current reduction in agricultural research, the MEFEC is under increased pressure to sell large parcels of land to raise capital for the university. While land sales may financially benefit the university in the short term, they would effectively eliminate the MEFEC's natural resource and agricultural research components as an option for the farm in the future. The intrinsic value of the MEFEC land to UAF, the University of Alaska System, and to the people of Alaska far exceeds the monetary value of the real estate, as well as the value of the teaching, research, and outreach that occurs on that real estate. A report published in 2015 concluded there is a \$5.00 return for every \$1.00 of real estate value for maintaining public open spaces in the Mat-Su Valley and not developing the land into private or commercial facilities.¹

MEFEC VISION

The future of the MEFEC is at the convergence of agricultural research, community education, and outreach. The MEFEC Long-Range Plan responds to the challenges stated above and envisions a 900 acre campus that provides experiential learning on multiple levels: field research projects, Cooperative Extension courses to foster healthy lifestyles, formal classroom studies for degree-seeking students, and educational opportunities such as natural resource demonstration sites positioned along the MEFEC's walking trails.

The MEFEC will continue to be good stewards by preserving the land for future generations. Recent reports warning of the consequences of climate change for Alaska and the planet make this stewardship even more critical. The MEFEC property is part of the Mat-Su Valley boreal forest and serves as part of a carbon sink, where atmospheric carbon dioxide, a major greenhouse gas, is stored and sequestered out of the

earth's atmosphere. With the increased likelihood that climate change will decrease agricultural production in traditional food growing regions of the United States, and potentially increase agriculture production in northern climates such as Alaska, the MEFEC's ability to perform agricultural research in the future will be critical.

While stewardship and preservation of the MEFEC's land assets is a key objective, this plan also recognizes the need for the farm to become a self-sustaining research and extension facility. The MEFEC will pursue strategic land sales and natural resource extraction on MEFEC property if economically advantageous and supportive of the MEFEC vision. The MEFEC will, in all cases, coordinate any natural resource extraction with opportunities to provide educational experiences, such as classes on extraction and reclamation techniques and best practices. The revenue generated from the above sources may be used to meet both the MEFEC's needs and to support UAF's strategic goals in research and outreach across the state.

The purpose of this Long-Range Plan is to outline the path the MEFEC will take to become an integral component for the positive growth and development of all communities involved at the MEFEC: the Mat-Su Valley community, the international research community, and the UAF community. This document is both grounded in the history and work previously completed at the MEFEC, and in a vision for the future ability of MEFEC to respond to the questions of Alaskans regarding agriculture, natural resources, youth and community development, home health, nutrition, food production, and food preservation. This is a living document that will keep the MEFEC focused on the University's tripartite mission of teaching, research, and outreach while providing enough flexibility to take advantage of new and meaningful opportunities for engagement as they arise.

ASSETS

An Allis-Chalmers tractor in the
Straw Mixing Barn.

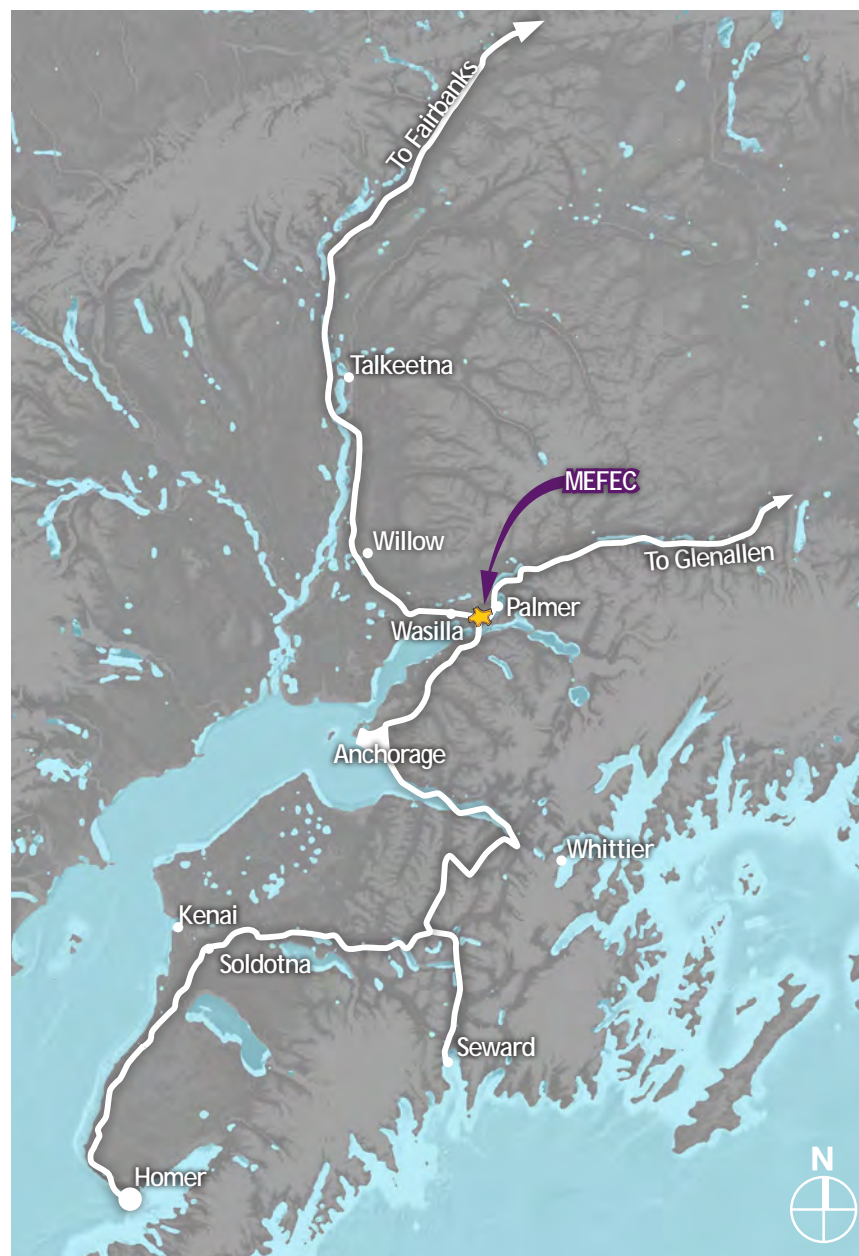


LOCATION

The MEFEC is located in the Matanuska Valley at the intersection of the Glenn and Parks Highways; two of the main transportation corridors in the state. The farm is adjacent to the Mat-Su Regional Medical Center and Outpatient Centers. In addition, the MEFEC is located near Anchorage and the Ted Stevens International Airport and is ideally positioned to be a learning center for people throughout Alaska and visitors from outside the state. Geographically, the farm links UAF to Southcentral Alaska which is projected to have the highest population growth (77%) in Alaska, over the next thirty years. (See Graph 1: Predicted Alaska Population, 2017-2045 on the following page)

Residents of the Mat-Su Valley are most familiar with the MEFEC as the western end of the Matanuska Greenbelt system: 33-miles of continuous trails on lands owned by multiple entities such as the UAF Matanuska Experiment Farm and Extension Center, UAA Matanuska-Susitna College, Mat-Su Borough (Crevasse-Moraine Trails), and State of Alaska (Matanuska Lakes State Recreation Area). The Greenbelt is the largest uninterrupted public space in the core of the Mat-Su Valley. Approximately 11 miles of the MEFEC farm roads are used as part of this trail system. The trails of the Greenbelt are some of the only non-mountain, non-motorized pathways in the area, and are popular with dog walkers, mountain bikers, geocachers, cross-country skiers, runners, and equestrians (see the MEFEC Property Map on page 10).

The MEFEC is situated on approximately 907 acres: 30 acres are in pasture, 200 acres are tillable ground, 80 acres of lakes, and the remaining 597 acres are buildings, woods, and roads. The pasture provides space and fresh grass for livestock on the farm. The tillable areas of the farm are used for a variety of purposes depending on the time of year, the needs of the farm, and various program trials and ongoing experiments. Currently, the focus of production on the farm is hay. The most productive hay fields are fertilized in the spring of each year, but many acres of the tillable land are unfertilized and available for potential food production methodology studies. The lakes are all isolated and serve as small, independent watersheds available for future limnology and eco-hydrology studies. Johnson Lake (40 acres),



The MEFEC's location next to the State's major population and transportation hubs allows it numerous opportunities to provide educational experiences for people throughout Alaska.

is the site for ADF&G “closed to sport fishing” research on fish population age structures. There are no rivers or streams on the MEFEC property. Twenty acres is enclosed for continued ADF&G wild ungulate nutritional studies. The remaining 597 acres are buildings, woods, and roads in varying degrees of readiness for future ecological, forestry, carbon cycling, or recreational research.

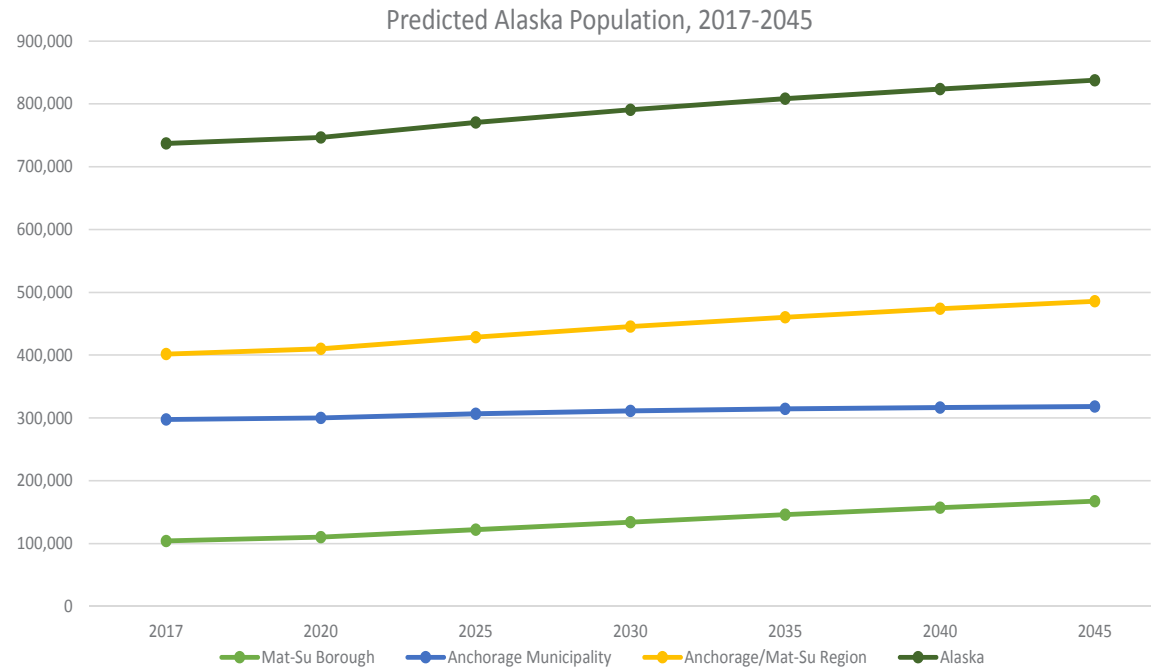
FACILITIES

Building infrastructure consists of the Kerttula Hall office and lab building, two dozen farm-type facilities (barns, sheds, shops, and storage buildings), a 35-year-old research laboratory, and several wood frame residential buildings (see Existing Conditions: Facilities Inventory Map on page 9). Most of the residences and farm buildings are of original construction and are between 60 and 100 years old. The MEFEC on-site utilities include a well water distribution system and septic sewer system, both of which are in need of major renovation or full replacement. Power and natural gas are provided by local utility companies. All MEFEC facilities and their maintainable equipment are included in the UAF Asset Inventory Management (AIM) database for lifecycle cost tracking and scheduling of preventative maintenance activities.

One of the first facility action items of the MEFEC Long Range Plan will be to assess each facility to determine its condition and programmatic fit. Buildings will then be renovated, repurposed, or demolished based on those determinations.

PROGRAMMATIC

All programmatic work at the MEFEC is driven by the need to prepare Alaskans to become active citizens and lifelong learners, and by the four interwoven intentions of the land-grant college: the First Morrill



Population data compiled from the Alaska Department of Labor and Workforce Development Report “Alaska Population Projections: 2017 to 2045” Published June 2018.²

Act (commonly known in 1862 as the “Land-Grant Agricultural and Mechanical College Act”), the Hatch Act (1887) that funded agricultural experiment stations to be associated with every Land-Grant College, the Smith-Lever Act (1914) that funded the Cooperative Extension Service as the outreach arm of the Land-Grant College, and the UAF Mission (2012). Taken together, the Morrill Act, the Hatch Act and the Smith-Lever Act define the tripartite mission of the Land-Grant University as teaching, research, and outreach. As a land-grant university, the UAF mission is not only driven by the tripartite Land-Grant mission but also responds to the Alaskan people through the Board of Regents and through interactions with stakeholders. The MEFEC future is well aligned with federal legislation creating the modern Land-Grant University and with the UAF mission. The MEFEC is a location where teaching, research, and outreach dynamically shape



EXISTING CONDITIONS: FACILITIES INVENTORY MAP

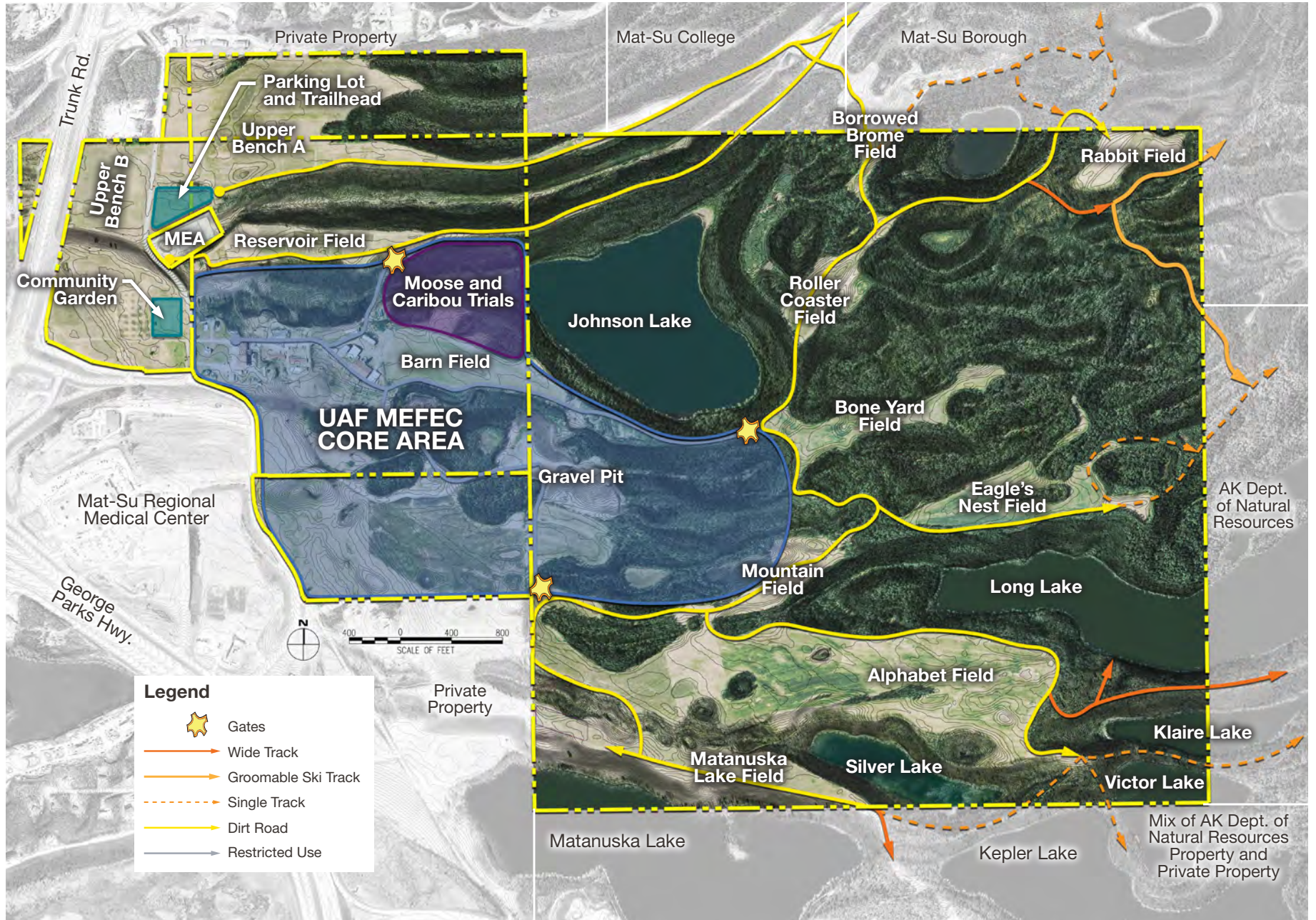
and improve the lives of all Alaskans.

The ME FEC strives to provide a tripartite presence in teaching, research, and outreach. Faculty use internet-connected classrooms and other distance technologies at the ME FEC, allowing students from the Mat-Su Valley and Anchorage Bowl areas to complete UAF coursework and degree requirements while living at home. Degrees offered include minors in Sustainable Agriculture and Forestry, Bachelor of Science in Natural Resources and Environment, Master of Natural Resources, Master of Science in Natural Resources, and Doctor of Philosophy in Natural Resources Sustainability. The ME FEC is currently working on an agreement with the neighboring UAA Mat-Su College to allow students to earn general education credits at the UAA Mat-Su College while

matriculated in a UAF ME FEC program.

Research at the ME FEC is still occurring in traditional agriculture, such as cereal grain selection, vegetable variety trials, and other issues related to food security. Additionally, research in non-agriculture related topic areas such as outdoor recreation, renewable energy, bio-based products, and wildlife habitat quality is increasing significantly. The new ME FEC is multidimensional and forward thinking.

The presence of the Extension faculty members and the diversity of Extension programs including 4-H, home economics, nutrition education, agriculture, master gardener, integrated pest management, among other programs at the ME FEC, has dramatically increased public involvement at the facility.



MEFEC PROPERTY MAP AND TRAILS



Horticulture employees planting potatoes using a D12 Allis Chalmers Tractor, May 2009.



Community gardens at ME FEC.



A learning opportunity at an ME FEC event



Free produce seeds from ME FEC crops.



Farm crew baling high moisture hay for a research project

FUTURE VISION

MEFEC Core Facilities Area with the Chugach Mountains in the background.



MEFEC LONG-RANGE PLAN OBJECTIVES

Using the UAF Strategic Plan as a guide, a series of objectives for the MEFEC has been created. Matrices are used to relate each action item to the particular objective(s) they support.

- **Strengthen community collaborations**

The MEFEC will continue to grow already established community collaborations and will work to develop new relationships that support attaining the long-range objectives.

- **Advance food security research and education programs**

Market the MEFEC as a subarctic agricultural, boreal forest, and freshwater lake system research site for local and global researchers. This commitment will take time to see revenue generation, however, becoming a sought-after research site will pull the MEFEC into research proposals and large grants.

- **Participate in the UAF One Health Initiative**

The MEFEC will be a site for the UAF One Health Initiative research, teaching, and outreach in Southcentral Alaska. Mat-Su Valley communities are beginning to work on livable community initiatives that strive to create healthy communities in concert with the One Health Initiative. The MEFEC is ideally positioned to play a leading role in this work.

- **Expand statewide occupational certificate programs**

Offer face-to-face and distance-delivered short-term programs that meet the training and education needs of various professions in Alaska.

- **Become a long-term agroecological site**

MEFEC is ideally located for participation in long-term monitoring networks for subarctic agroecological and forestry research. Once involved, researchers will bring research to the site as well as increase the potential for the MEFEC to become an ecotourism destination.

- **Develop on site STEAM/Citizen Science Center**

The MEFEC will be the site of the premiere Science Technology Engineering Arts and Mathematics Center where multi-disciplined citizen science groups can gather, meet, create, and research agroecological and natural resource concepts.

- **Modernize facilities & infrastructure**

The MEFEC facilities and infrastructure will be identified for renovation, repurposing or demolition based on programmatic needs. Renovations will proceed based on priority and available funding.

- **Reduce dependency on Fund 1 state funding by 30% from FY18**

Diversification of revenue generation at the MEFEC beyond hay production will provide stability and resilience for future programs and opportunities. The MEFEC O&M costs will be reduced through energy efficient facility improvements and replacement of maintenance intensive equipment.

IMPLEMENTATION

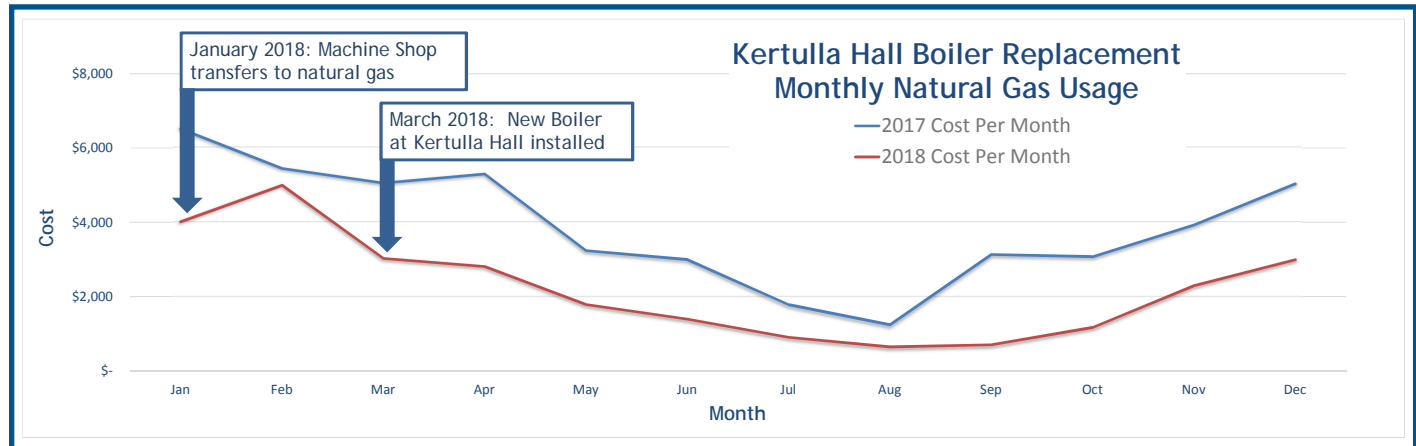
The following section outlines the short, mid, and long-term actions needed to implement the Long-Range Plan Objectives. An implementation matrix identifies which objectives are supported by each action item. A precise implementation schedule is not specified to allow flexibility for programmatic changes and potential funding shifts. Maps of the MEFEC are included for each phase to identify buildings or areas where these action items will occur.

This implementation strategy focuses on using strategic sales of land that are not critical to the long-term mission of the MEFEC to provide revenue to allow the MEFEC facilities and infrastructure to be renovated to support the programmatic needs of the MEFEC as early in the long-range plan as is feasible. This will allow the MEFEC to begin executing the research, teaching, and outreach programs that it sees as vital to the success of the MEFEC as early in this planning cycle as possible.

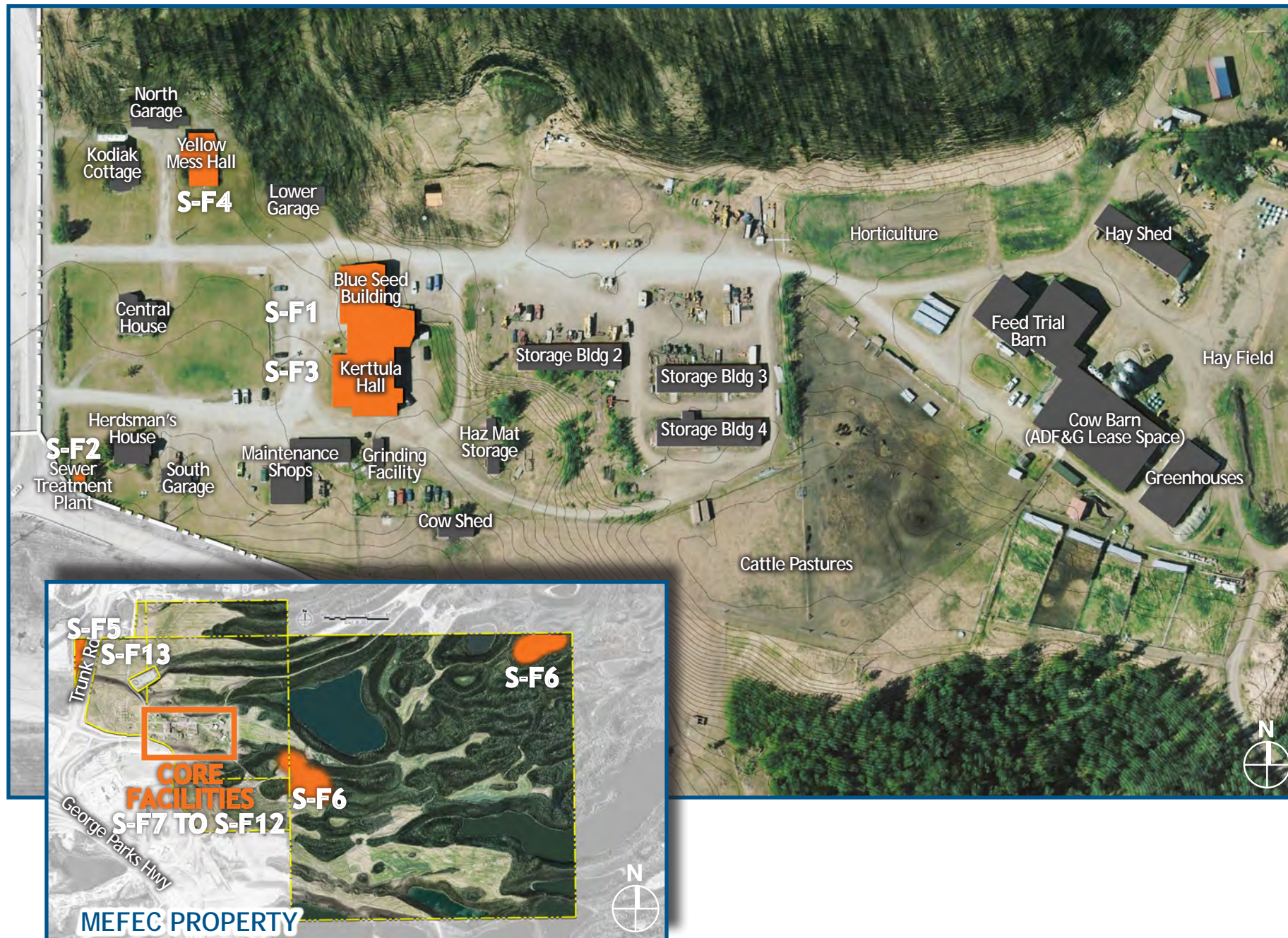
MEFEC IMPLEMENTATION STRATEGY: SHORT-TERM ACTION ITEMS

OBJECTIVES	I. Strengthen community collaborations	II. Advance food security research and educational programs	III. Participate in the UAF One Health Initiative	IV. Expand statewide occupational certificate programs	V. Become a long-term agroecological site	VI. Develop on-site Science Center	VII. Modernize facilities & infrastructure	VIII. Reduce dependency on Fund 1 state funding by 30% from FY18	FACILITIES ACTION ITEMS
								S-F1. Complete Phase II of Kerttula Hall boiler replacement project (see results of Phase I in graph below)	
								S-F2. Replace MEFEC Campus septic treatment system	
								S-F3. Begin design on ADEC Compliant teaching kitchen	
								S-F4. Determine improvements needed to make Mess Hall compatible to house MEFEC guests	
								S-F5. Initiate strategic land sales and leasing opportunities with outside entities	
								S-F6. Initiate MEFEC gravel extraction discussions with outside entities	
								S-F7. Investigate payback on connecting to city water and make a go/no go decision	
								S-F8. Assess campus facilities for future repurposing, renovation or demolition	
								S-F9. Demolish MEFEC facilities not slated for renovation or repurposing	
								S-F10. Increase campus security through property cleanup and installation of security cameras	
								S-F11. Extend internet connectivity behind Kerttula Hall	
								S-F12. Improve access gates and signage	
								S-F13. Investigate opportunities for public-private partnerships for limited land development	

S-F1: The Kerttula Hall Boiler Replacement project recently replaced the building's failing steam boilers with a more energy efficient hydronic boiler. The graph to the right compares the natural gas usage of the building prior to and after the boilers were replaced.



SHORT-TERM ACTION ITEMS: CORE FACILITIES MAP



MEFEC IMPLEMENTATION STRATEGY: SHORT-TERM ACTION ITEMS (CONTINUED)

OBJECTIVES	I. Strengthen community collaborations	II. Advance food security and educational programs	III. Participate in the UAF One Health Initiative	IV. Expand statewide occupational certificate programs	V. Become a long-term agroecological site	VI. Develop on-site Science Center	VII. Modernize STEM/Citizen infrastructure	VIII. Reduce dependency on Fund 1 state funding by 30% from FY18	PROGRAMMATIC ACTION ITEMS
								S-P1. Expand the MEFEC tour opportunities to specific audiences and continue the monthly free community tours	
								S-P2. Participate in FFA State trainings and conference	
								S-P3. Actively initiate community collaborations with state FFA groups, farmers, Native associations, school districts, UA System, the Palmer Arts Council, citizen science groups, health care professionals, and local food/community food system advocates	
								S-P4. Increase marketing and visibility of the MEFEC	
								S-P5. Revive the “Friends of the Farm” community group to support the MEFEC	
								S-P6. Develop a volunteer or docent corps from interested community members	
								S-P7. Increase community gardening opportunities	
								S-P8. Mine global food security research to discover what is being done and how the MEFEC can increase the knowledge in this area	
								S-P9. Be a site for local, state, regional, national, or subarctic food security and education programming	
								S-P10. Offer food safety workshops through distance delivery and/or face-to-face	
								S-P11. Partner with UA researchers and outside universities on applicable research at the MEFEC (WSU Glen Franklin Scholarship)	
								S-P12. Maintain relationship with the Division of Agriculture’s Plant Materials Center for crop demonstrations and variety trials	
								S-P13. Offer community learning opportunities on demonstration and variety trial plots	
								S-P14. Develop a field day for farmers to visit crop demonstrations	
								S-P15. Partner with Alaska Department of Fish and Game on wild harvest use workshops	
								S-P16. Continue to offer One Health oriented programming such as Strong Women/Seniors strength training, food safety workshops and trainings, SNAP-Ed and EFNEP program support, participating in the CHIL grant, food preservation classes, and diabetes prevention	
								S-P17. Host veterinary science and animal health workshops and trainings through 4-H, FFA, and other programs	
								S-P18. Offer distance education certificate programs in food protection management, pesticide safety training, Master Gardener programs	
								S-P19. Investigate new certificate programs for current trainings such as turf management and GIS/GPS	
								S-P20. Partner with state agencies to lease distance education technology classrooms for their trainings for statewide offerings like forestry	
								S-P21. Participate and partner with NRCS and the Plant Materials Center on their Soil Health study	
								S-P22. Access potential agroecological network availability	
								S-P23. Identify and develop access for a primitive campsite open to community groups	



Extension Agent Julie Cascio demonstrates food preparation.



Dr. Lisa Lunn demonstrates proper animal care.



Spring starts in the green house.



Red Angus cattle at the MEFEC.



An Alaska Department of Fish and Game (ADF&G) moose.

MEFEC IMPLEMENTATION STRATEGY: MID-TERM ACTION ITEMS

OBJECTIVES	I. Strengthen community collaborations	II. Advance food security and educational programs	III. Participate in the UAF One Health initiative	IV. Expand statewide occupational certificate programs	V. Become a long-term agroecological site	VI. Develop on-site STEAM/Citizen Science Center	VII. Modernize facilities & infrastructure	VIII. Reduce dependency on Fund 1 state funding by 30% from FY18	FACILITIES ACTION ITEMS
								M-F1. Construct Kerttula Hall teaching kitchen	
								M-F2. Renovate Mess Hall for MEFEC guest housing	
								M-F3. Continue to make improvements to trailhead and trails system in coordination with the local community.	
								M-F4. Investigate cost/benefits of installing alternative energy (wind/solar) infrastructure improvements.	
								M-F5. Begin design on top priority facilities that are slated for renovation and repurposing	
								M-F6. Build an outdoor education shelter for teaching and training opportunities and for lease	
								M-F7. Develop public-private partnership land lease opportunities	
								PROGRAMMATIC ACTION ITEMS	
								M-P1. Be a location for conference workshops, local events, and citizen science learning opportunities	
								M-P2. Be a field trip destination for Anchorage or Fairbanks conferences related to the MEFEC	
								M-P3. Work with the "Friends of the Farm" to create a fundraising entity for growth opportunities at the MEFEC	
								M-P4. Work with community groups to develop a universal access trail at the Kin-Win Trailhead to include "natural foods" passive learning stops	
								M-P5. Create community garden mentoring project	
								M-P6. Advertise and attract sabbatical researchers from outside universities	
								M-P7. Host USDA Agricultural Research Station scientists and food security researchers	
								M-P8. Obtain federal and international food security grants for agricultural education	
								M-P9. Presentations and research on growing healthy and high-quality forage	
								M-P10. Offer trainings and learning walks along the "natural foods" trail for community groups, health professionals, and school groups	
								M-P11. Increase statewide offerings of food safety trainings and workshops	
								M-P12. Collaborate with statewide career-oriented training programs at high schools and voc-tech centers to meet the needs of future students.	
								M-P13. Offer Local Food Leader certification	
								M-P14. Research opportunities for Master Forester, Master Food Preservation, and One Tree certificate offerings	
								M-P15. Become a location for professional Continuing Education courses for professions in social work, education, health care, etc.	
								M-P16. Become a long-term agroecological monitoring network site	
								M-P17. Use revenue from the self-sustaining campsite to fund the first Alaska Science, Technology, Engineering, Arts, and Mathematics (STEAM)/Citizen Science Center	

MID-TERM ACTION ITEMS: CORE FACILITIES MAP



MEFEC IMPLEMENTATION STRATEGY: LONG-TERM ACTION ITEMS

OBJECTIVES								FACILITIES ACTION ITEMS
I. Strengthen community collaborations	II. Advance food security research and educational programs	III. Participate in the UAF One Health initiative	IV. Expand statewide occupational certificate programs	V. Become a long-term agroecological site	VI. Develop on-site STEAM/Citizen Science Center	VII. Modernize facilities & infrastructure	VIII. Reduce dependency on Fund 1 state funding by 30% from FY18	
								L-F1. Begin renovation/repurposing of MEFEC campus facilities
								L-F2. Implement alternative energy improvements if economically or programmatically advantageous to the MEFEC
								L-F3. Long-term revenue from public-private partnership land lease(s)
PROGRAMMATIC ACTION ITEMS								
								L-P1. "Friends of the Farm" philanthropic group creates an endowment
								L-P2. Host the biannually international circumpolar agriculture conference
								L-P3. Hire a staff member to run the One Health program at the MEFEC for Southcentral Alaskans
								L-P4. Create interest in student career development through the One Health programs offered at the MEFEC
								L-P5. Offer "train the trainer" opportunities for certificate programs for future trainings
								L-P6. Continue to find more options for certificate programs
								L-P7. Attract ecotourists to the MEFEC
								L-P8. Increased guest researcher and student visits
								L-P9. The MEFEC is an international subarctic agricultural, boreal forest, and freshwater lake system research site
								L-P10. Fundraising for the Alaska STEAM/Citizen Science Center

LONG-TERM ACTION ITEMS: CORE FACILITIES MAP



ONGOING PLANS

The MEFEC administration and staff will continue working to investigate, develop, cultivate, support, and maintain partnerships and collaborations to increase revenue generating relationships. Currently, the MEFEC is cultivating relationships with the following entities:

- Federal Agencies such as USDA, Natural Resource Conservation Service, Bureau of Land Management, and the USDA Agricultural Research Service
- State Agencies such as the Division of Agriculture, the Plant Materials Center, Alaska Department of Fish and Game
- UA System Administration, Faculty, and Staff
- Alaska Pacific University Spring Creek Farm, Kellogg Campus
- Alaska Public School Districts and Homeschool Units
- Professional Societies such as Soil Science Society of America, American Association for the Advancement of Science, Crop Science Society of America, and the American Society of Agronomy
- Mat-Su Borough
- Cities of Palmer, Wasilla, and Houston
- Municipality of Anchorage
- Community Councils
- Non-profit Groups

CONCLUSION

The Matanuska Experiment Farm and Extension Center is uniquely positioned to be an invaluable component of UAF's mission now and into the future. With its origins firmly rooted in the history of the State of Alaska and now located in the midst of a thriving community, gifted with abundant natural resources, and comprising a team of enthusiastic, dedicated faculty and staff, the MEFEC is well placed to continue its stewardship and service to the people of Alaska. The MEFEC will work to become a strong community, statewide, regional, and national facility where the UAF mission and the Land-Grant University tripartite mission of teaching, research, and outreach is not only happening daily but is apparent and obvious in all physical and programmatic opportunities offered at MEFEC.



ENDNOTES

- 1 Maya Kocian, Economic Benefits of Trails, Parks, and Open Space in the Mat-Su Borough, Report Version 1.0. (Tacoma, Earth Economics, 2015), 18.
- 2 Bill Walker, Heidi Drygas, Dan Robinson, et al. Alaska Population Projections: 2017 to 2045 (Alaska Department of Labor & Workforce Development: Research and Analysis Section, June, 2018) 26-27, <http://live.laborstats.alaska.gov/pop/projections/pub/popproj.pdf>