

Toolik Field Station

Town Hall - February 28, 2025



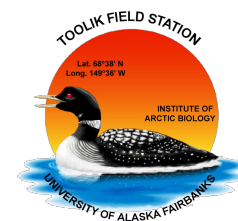


We acknowledge the Alaska Native nations upon whose traditional lands our field station operates. In Fairbanks, our Logistic offices are located on the traditional lands of the Troth Yeddha' Dena people of the Lower Tanana River. We acknowledge that Toolik Field Station and the surrounding areas are located on the ancestral hunting grounds of the Nunamiut, and occasional hunting grounds and routes of the Gwich'in, Koyukuk, and Iñupiaq peoples.

Toolik Field Station recognizes, and is grateful for, the Indigenous people who inhabit and steward the land.



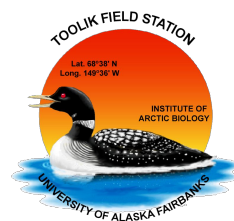
Operations - What to expect?



- **Summer reservations due March 31**
- **Transportation to and from Toolik:**
 - North and south trucks will run on Tuesdays and Thursdays.
 - Additional Northern Alaska Tour Company vans will augment truck capacity, running north on Thursdays and south on Fridays during peak weeks.
 - The [Dalton Highway Express](#) is an option for individual travelers, \$200.
 - North on Saturdays & Tuesdays, south on Sunday & Wednesday.
 - Arrival days to the station are Tuesday, Thursday, and Friday.
 - Prudhoe Bay taxi remains an option for travel on a case by case basis and should be coordinated in advance. - Station Managers
 - Other arrival days need to be approved by the station manager, Mike Reynolds - uaf-iab-tfs-manager@alaska.edu, mjreynolds4@alaska.edu.



Operations - What to expect?



- **Staff Hours:**

- 8:30 a.m. - 5:30 p.m. Monday - Saturday. Sundays are a day off for the staff.
- Station Manager and on-duty EMT remain available to respond to community needs/emergencies on Sundays.

- **Vehicle Fueling:**

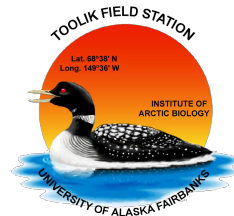
- Make plans in advance. If you have an early departure to the field and need refueling, please see the operations staff the night prior during business hours if at all possible.
- If you know you need fuel before going out on Sunday, please see the operations staff Saturday night.

- **Composter:**

- The new composter will be operational this season. We will conduct a trial run with the kitchen staff before changing trash can configuration for the community as a whole.



Operations - What to expect?



- **Reserving Pad Vehicles:**
 - Vehicles are available on a first come first serve basis. They may not be reserved in advance of a project's arrival to the station.
 - In some instances they may be reserved the night before for the following day, in which case those requesting to reserve a truck should speak with the on-site manager.
- **Orientation Slide Show:**
 - Toolik staff have worked to create a presentation with material covered during the on-site orientation. This presentation will be sent via email to visitors of the station in conjunction with reservation reminders.
 - The intent is to avoid information saturation upon arrival at the station and serve as a reference for frequently asked questions.
 - There will still be an orientation given at the station.



Authorized Driver Updates



Driver Form requirements will be changing partway through the season due to a property transfer of our vehicles from Battelle to UAF/Toolik. We will be collecting ALL required forms from the start of the season, but when the switch happens, Battelle forms and restrictions will end.

Battelle Form Details (Outgoing)

- Required for all north/southbound vehicles & all pad trucks.
- **Age restriction of 25 years old** to be an authorized driver.
- Documents required to complete Battelle forms include:
 - Photo of front and back of valid drivers license.



Authorized Driver Updates



UAF Form Details (Incoming)

- UAF has separate processes for UAF-affiliated drivers vs non-affiliated drivers.
- Required for all north/southbound vehicles & all pad trucks.
- **Age restriction of 21 years old** to be an authorized driver.
- People with only international licenses **cannot** become authorized drivers.
- UAF forms require additional background materials that take longer to collect and involve a UAF approval process. **It WILL NOT be possible to process them last minute.**
- Documents required to complete UAF forms include:
 - Driving records from all licensed locations in the last three years.
 - Completion of UAF driver training with proof of 100% test score.
 - Photo of front and back of valid drivers license.
 - Must provide and maintain a current certificate of insurance from home affiliation, showing Worker's Compensation and General Liability and if possible, name UA as the additional insured with respect to General Liability.

Logistics Support Request System Updates (SRS)

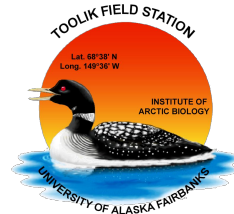


The Logistics Support Request System (SRS) options have been updated with more specific categories.

- Shipping (TFS -> World)
- Shipping (World -> TFS)
- Hold In Fairbanks (TFS -> Fairbanks)
- Hold in Fairbanks (World -> Fairbanks)
 - This is intended for incoming packages with special handling requirements.
- Order Pickup Requests
- Fairbanks Dry Ice Request
- Liquid Nitrogen Request
- Compressed Gas Request
- Other Logistics Support



Southbound to Ship Out/Hold



There are new labels that will be stocked in the community center shipping area for better labeling of southbound packages.

- Southbound Sample HOLD
- Southbound Sample Shipment

Southbound Sample SHIPMENT	Southbound Sample HOLD
SRS #: _____ Package # _____ of _____	SRS #: _____ Package # _____ of _____
Submitter name: _____	Submitter name: _____
Submitter email: _____	Submitter email: _____
Date south from Toolik: <input type="text"/> Date shipping out of Fairbanks: <input type="text"/>	Pickup contact name: _____
We suggest shipping temperature sensitive samples on Monday/Tuesday We can hold samples at temperature over the weekend in Fairbanks	Pickup contact phone number or email: _____
Temperature requirement: <input type="checkbox"/> DNF <input type="checkbox"/> None <input type="checkbox"/> 4°C <input type="checkbox"/> -20°C <input type="checkbox"/> -80°C	Date south from Toolik: <input type="text"/> Expected pickup date: <input type="text"/>
Hazmat?: Yes or No if yes, UN # _____	We can hold samples at temperature over the weekend in Fairbanks
<input type="checkbox"/> I will affix my shipping label <input type="checkbox"/> I will remove/cover old shipping labels and barcodes <input type="checkbox"/> I have submitted an SRS on MyToolik <input type="checkbox"/> I will notify a staff member of this shipment <input type="checkbox"/> I will affix special labels if needed (haz, fragile, etc) <input type="checkbox"/> My package is taped shut with clear packing tape	Temperature Requirement: <input type="checkbox"/> DNF <input type="checkbox"/> None <input type="checkbox"/> 4°C <input type="checkbox"/> -20°C <input type="checkbox"/> -80°C
	Hazmat?: Yes or No if yes, UN # _____
	<input type="checkbox"/> I have submitted an SRS on MyToolik <input type="checkbox"/> I will notify a staff member of this shipment <input type="checkbox"/> I will affix special labels if needed (haz, fragile, etc)

Business Office



- TFS rate increase in 2025 to \$127/night
- Please review your project record and reservations to assure that your billing information is accurate
 - TFS bills monthly. If you have specific billing timing, please email the [business office \(UAF-Toolik-Business@alaska.edu\)](mailto:UAF-Toolik-Business@alaska.edu).
- Please set up your fuel account when you make reservations
 - TFS staff fuel trucks, but you need to have an account in place to buy fuel for project provided transportation.
 - Allow 5 business days from the time of request to have an active fuel code in the system.



A La Carte



- Chemicals, specialized deionized water, supplies
 - TFS does not provide any chemicals; we do provide RO and DI water at TFS.
- Dry ice
 - TFS can provide up to four bricks (10 pounds) of dry ice per project, per season. More than 4 bricks will be a charge of \$25 per brick.
 - Fairbanks logistics can assist in ordering dry ice in town through the SRS system.
- Compressed gas — at cost, if available at UAF.
- Liquid nitrogen
 - TFS can provide liquid nitrogen, via UAF's Institute of Arctic Biology, subject to local availability. We are charged \$3.50/liter, which we will pass on to the research groups.
- SIPRE auger blades—\$250 (market cost) for a blade set, the first time that you want to use the auger. Your project will own your blades, and can use them multiple times.
- Fresh food for remote spike camps — \$30/per person per day for perishable supplies like dairy or vegetables. Provided on a case-by-case basis



Communicable Illnesses

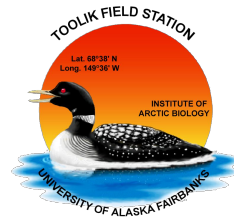


Travelers are no longer required to:

- Be vaccinated for COVID.
- Test for COVID before departure for TFS or 5 days post-arrival.
 - Unless symptomatic on the day of travel



Communicable Illness



Travelers are still required to:

- Test if they have symptoms before or after they arrive to TFS.
- Isolate in their rooms if they test positive (or are confirmed to have a respiratory illness) and be monitored until cleared by the on-site EMT.
 - Managers will attempt to relocate roommates, but this may not always be possible depending on the population level.
- Delay their departure date if they test positive in the week preceding their scheduled departure date for TFS.



Communicable Illness

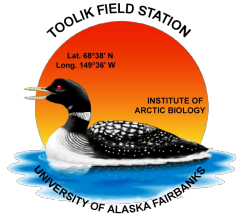


Travelers must report to TFS Safety if they have are symptomatic within a week of departure. Those who display symptoms of illness may be delayed on a case-by-case basis.

Those who have been in close contact with someone who has a confirmed communicable illness may be subject to additional testing requirements and distancing procedures.



HAZMAT Shipping



- Shipping hazardous materials (HAZMAT) is a highly regulated process that requires input from trained and knowledgeable personnel in order to do correctly.
- There are serious penalties for intentional or unintentional noncompliance with federal regulations.
- It is the responsibility of project personnel to ensure that their materials are packaged, marked, labeled, and documented correctly.
- UAF EHSRM will only provide detailed assistance regarding HAZMAT packages for UAF-affiliated projects.
- Reach out to your home institution for guidance when shipping hazardous materials.



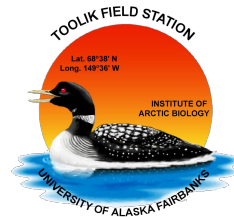
HAZMAT Shipping



- If you are sending hazmat shipments from TFS to a commercial shipper, you must complete a hazmat transfer form when sending (FedEx, UPS, etc.)
- Completion of this form will require confirmation that the individual assembling the package has either:
 - Received formal training on shipping regulations applicable to the package they are attempting to ship (CFR 49, IATA)
 - Received direct instructions on how to assemble their package by an individual who has received formal training on applicable shipping regulations
 - Most commonly from EHS staff at a home institution



HAZMAT Shipping



- If you complete the forms, TFS **will** assist with:
 - Loading your package into our vehicles
 - Transporting your package from TFS to Fairbanks in our vehicles
 - Drop off of package with shipping carrier (FedEx, UPS, USPS, etc)
- TFS **will not** assist with:
 - Packaging your materials
 - Marking or labeling your materials
 - Preparation of shipping papers and documentation
 - Inspecting packages for regulatory compliance



HAZMAT Shipping



- TFS staff will not open or alter your package in any way after you hand it off (except for when there is an obvious safety risk)
 - No more dry ice or liquid nitrogen "top offs" in Fairbanks by TFS staff (-80 freezers may be available)
 - Your personnel can top off in Fairbanks
- If unable to comply with the new shipping procedure, you will be required to accompany the package to Fairbanks and hand it off to a shipper yourself.



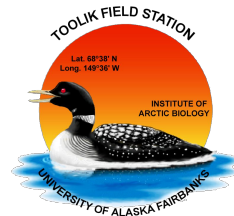
Sign-Out Board & Search and Rescue



- **Reminder: the sign-out board is there for our collective safety**
 - Be sure to erase your name after you have returned
 - If you suspect that you will be overdue use your inReach to notify the EMT and Station Manager and/or use your satphone.
- **Overdue procedure: Check InReach coordinates > Check room > Check lab > Field response (location dependent) > Contact State Trooper/SAR dispatch**
 - TFS staff will only drive out to check your last known field location if it is between Ice Cut and Atigun Pass.
- **After 10 p.m. the EMT is no longer actively monitoring the sign-out board**
 - If your overdue time is past 10 p.m. you may experience response delays - check in early and often and consider establishing an after-hours emergency contact that will be awake.



Lab Check-in & Check-out



Each lab group will receive guidance on checking in & out of lab spaces.

- Check-in
 - Expectations for use, cleanliness, safety supplies (e.g., shower, spill kits, SDS binder)
 - Labeling samples in fridge/freezer/drying oven
 - Equipment checkout
- Check-out
 - Plan enough time to pack and clean
 - Check-out by 5:30 pm the night before departure
 - Checklist of things to do before you leave:
 - All samples collected out of fridge/freezers/drying ovens.
 - Submit requests for chemical waste pickup, storage, etc.
 - Clean



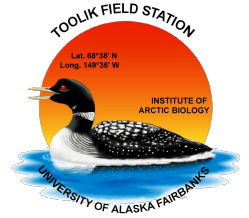
Spatial & Environmental Data Center



- Normal Operations
 - EDC
 - Remote Access & Field Support
 - Baseline measurements
 - Equipment Check-out
 - GIS
 - Drone & GPS Surveys
 - Site Selections
- Please get your support requests in as soon as possible.



Remote Access & Field Support



- Each project that is physically at Toolik (>5 user days/year) gets 40 hours of Remote Access/Field Support
 - > 40 hours of support and a fee will be charged by the hour (hourly rate = user day/8)
- Support includes anything from helping set up projects, scouting out new sites, sampling when you are not at the station, filtering in the lab and so much more.
- Please talk amongst your group about support so that all members of the team are emboldened to ask for assistance during the field season.
- Communication with projects and the EDC primarily occurs via Slack



Dave Wesolowski & Cétanna Schmauder measuring discharge, August 2021



Mayra Melendez Gonzalez carrying the ice auger back from a day in the field, May 2022



Bodie Davis and researcher Javier Acuna fixing wind turbine, July 2020



Aurora Researcher Kylee Brauning filming a rocket launch, April 2022



Dani Aguirre mosquito sampling, July 2021



Max Wasser & Dave Wesolowski setting up camera traps, May 2020



Amanda Young digging herself into a hole, 2022

Toolik GIS & RS

- We need to replace our DJI (Chinese) drones before Dec. 2025 to meet new federal regulations in the American Security Drone Act.
- We will submit one or more grants this year to fund new drones and sensors. If we are not successful, there may be an interruption in drone services.
- To align with other departments, ToolikGIS will charge for drone services, starting 2026:
 - Charge for Toolik GIS' time spent collecting and processing drone imagery.
 - The first 40 hours are free for each project (same as remote access).
- What sensors would best support your research?
 - Send email to uaf-tfs-gis@alaska.edu, Subject: "My Drone Dreams", list your top 1 or 2 sensors. Due April 30, 2025.



Drone-mounted methane sensor. Data available real-time and post-collection.



Drone-mounted GPR kit. Model shown can penetrate 12m below ground surface.



Thermal and RGB sensors integrated into small drone platform.



Handheld LiDAR sensor also mounts onto some drone platforms!



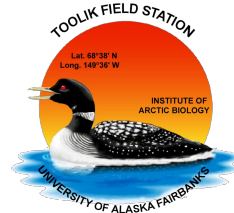
Website & myToolik



- myToolik
 - [Getting Started at Toolik](#)
 - Guide for anyone coming to Toolik to set up their myToolik profile and if they are a PI, their project
- Website
 - [Projects at Toolik](#)
 - Sub-pages such as the [AGU](#) page to highlight posters and presentations at the meeting
 - New [Stories from the Field page](#)



Opportunities for Broader Impacts

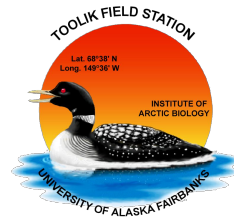


- Share your research & give a glimpse of what it's like to live and work at Toolik with a **social media takeover**
 - Sign up at QR code or bit.ly/toolik-social-takeover-2025
- Engage the Fairbanks community at UAF's **Arctic Research Open House**, May 16, 4-7pm
 - hdunleavy@alaska.edu for more info or to sign-up
- Artist-in-residence application due March 28
- Collaborate with **teachers** at Toolik
 - Amanda Morrison, arcticlter.education@gmail.com
 - In-person & virtual, Polar STEAM, researcher applications open polarsteam.info/application
- Arctic Interagency Visitor Center programming
 - hdunleavy@alaska.edu for more info or to sign-up
- Toolik Talking Shop - Every wednesday during the summer
 - ugrad presentations in late July. Email ayoung55@alaska.edu to sign-up.



Kristin Link, 2023 Artist-in-Residence

Wellness Room or the “Inlet Outlet”



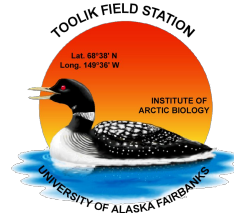
- TFS MEF repurposed the old EMT Shack into a reservable, private space for telehealth appointments, phone calls, meditation, etc.
- Special thanks to Scout Wise & Mandy Daulmiller

Community Gear Closet

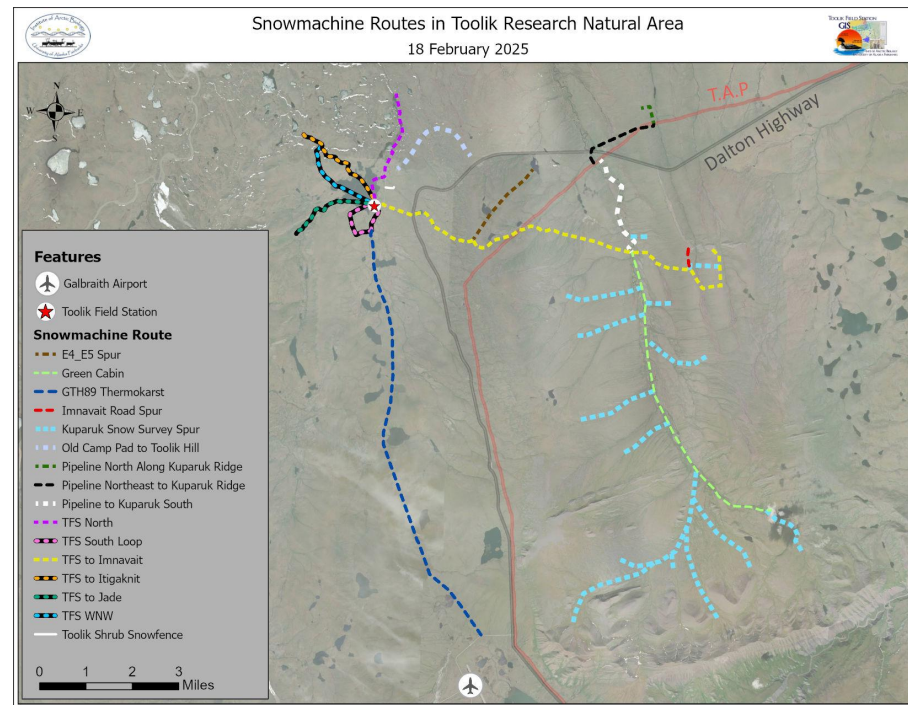
- Located in east side of the Science Workshop
- Listed on website at bit.ly/toolik-gear-closet
- Please share with your field teams.
- Have items to donate? Contact Haley Dunleavy or Ruby An



Snowmachine Route Authorization Map



- Toolik Management is concluding work with the BLM on a 'common-use' access route Right-of-Way authorization.
- Once approved, any Toolik-based project or contractor can use these common-use routes (assuming snow-depth requirements are met) without applying (and paying!) for their own snowmachine permit.
- Will likely be ready for next winter (25-26)
- Special thanks to BLM Realty Specialists Matt and Melissa for all their help and guidance with this effort!



International Access



Interact Non-Profit Association

- First call for TransNational Access and Remote Access to most INTERACT stations opens in April, for field season 2026

EU-funded project PolarIN

- Annual call for TransNational Access and Remote Access
- Closed for this year, will open in fall of 2025 for field season 2026

Both calls require short proposals (6 pages), c.v., etc.

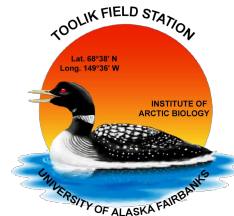
Americans are eligible to apply for work in a field station in another country

We hope to host at least one international group at TFS in summer of 2025



Tundra Award

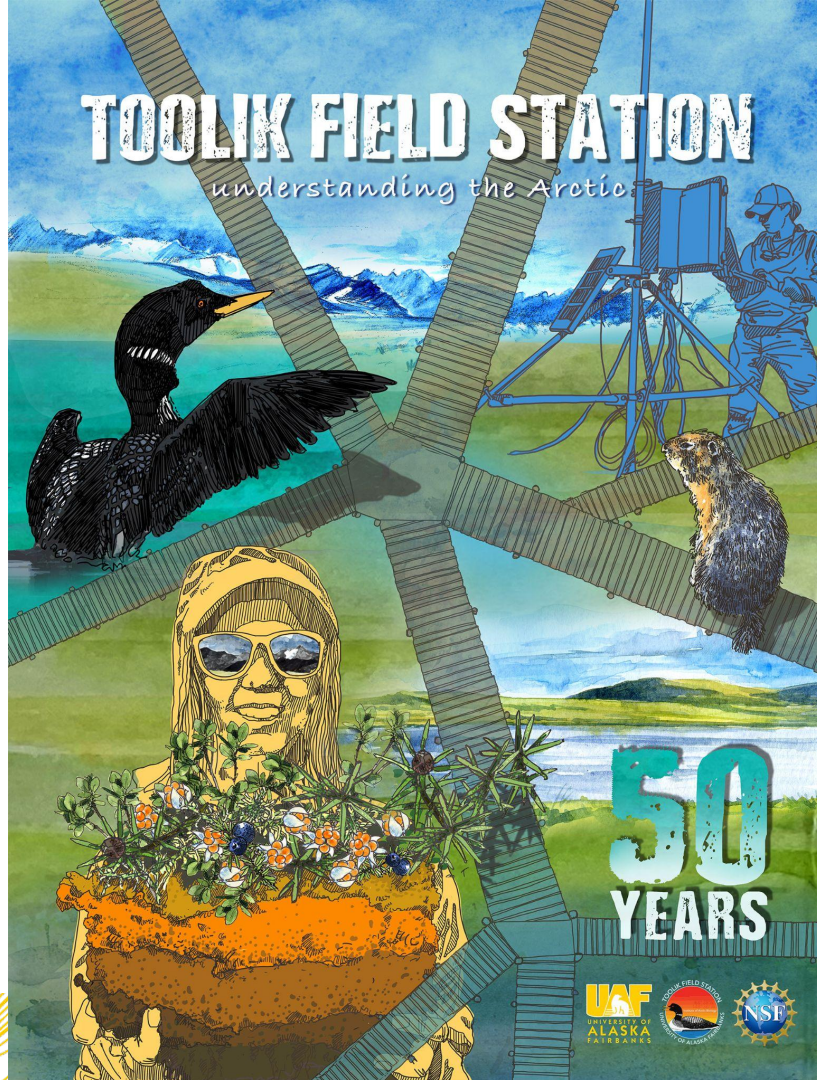
- Provides students & early career researchers with up to 10 days to conduct an independent research project at TFS
- Continuing in 2025, awardees will be announced in late March



UA Giving Day is March 25-27

Help us unlock the Steering Committee's \$1,250 challenge!





Celebrating 50 years!

Toolik Artist-in-Residence Sophie Binder
created a commemorative poster for
50 years of research at Toolik

bit.ly/toolik-store

Upcoming events

Toolik First Friday
Visitor's Day at the TFS

*Net proceeds will benefit the Toolik Field Station station
support fund, which supports activities including the
artist-in-residence, renewable energy initiatives, and outreach
efforts.*

Toolik Town Hall Meeting
February 28, 2025

Arctic Research Support & Logistics Services (ARSLS) Upcoming APP25 Projects at Toolik Field Station

Crew Size and Schedule

- 2025 Site supervisor is **Mark Farmer**
- Spring season is April 16 – June 5
 - Crew of 6
 - There is no plumber position in the spring
- Fall season is August 6 – September 18
 - Crew of 7
- The crew is mostly returning folks



Toolik Battelle ARO FEMC Project Summary

34 projects for the 2025 Season

- 15 sustaining projects
- 8 upgrade projects
- 2 science support projects
- Building maintenance type tasking
 - Electrical, plumbing, and structures will be inspected by crew
 - If you have an issue or know of an issue, please share it with Toolik or Battelle ARO FEMC staff

Highlighting some of the bigger projects and those with impacts to the community on station in 2025

APP25 Toolik Projects

Float Switches

- All station water impact
- Early spring



Network Switches

- Install insulated boxes – internet outages
- Will work with IAB and UAF IT to disconnect and reconnect servers for Wet Lab , Dry Lab, Lab 7, and Community Center



APP25 Toolik Projects



Dry Lab

- Reroof and flue work
- Spring work - some noise and heat loss

Boat Dock Boardwalk

- Remove and rebuild boardwalk to docks
- Spring/fall project



APP25 Toolik Projects

Dining Hall Improvements

- Replace drink station countertop
- Install LED lights in all fixtures
- Install a water bottle filling station



Impacts to Dining Hall drink service area and flow inside Dining Hall – will coordinate with Toolik cook staff and community

APP25 Toolik Projects

Toolik Composter Install

- Replace the existing exterior electrical panel
 - Power will be out to Lab 6&7 and other sites nearby
- Install interior electrical panel, fixtures, and hardwire the composter.



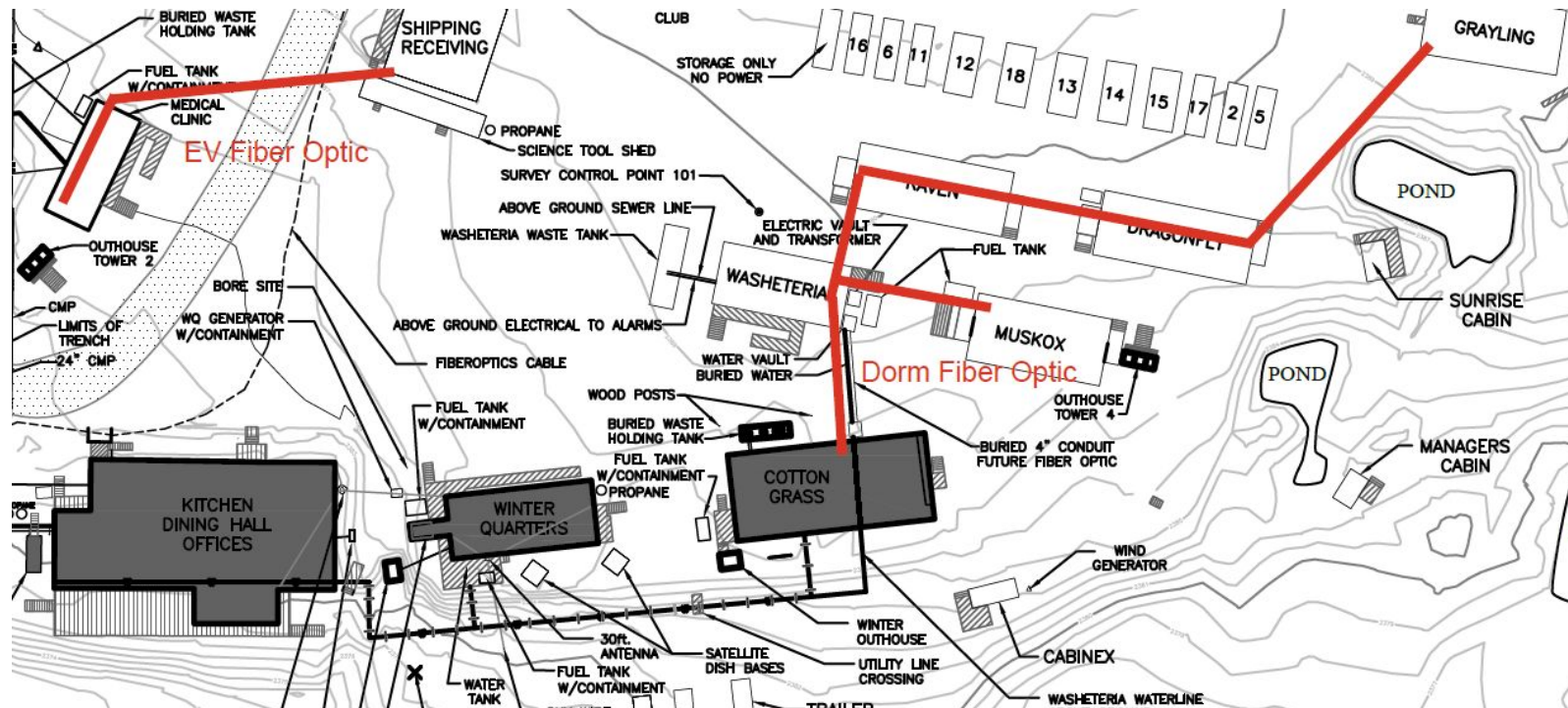
APP25 Toolik Projects

Electrical Vehicle (EV) Infrastructure and Fiber Optic Expansion

- Install two charging stations for EV trucks near the Science Workshop trailer
- Will complete Phase 1 of station fiber optic loop (resident side) to improve Station internet and Wi-Fi service.

Impacts on Station: trenching around dorms and across key pad locations





APP25 Toolik Projects

Toolik Garage

- Install gutters on the building and grade around the building to improve drainage

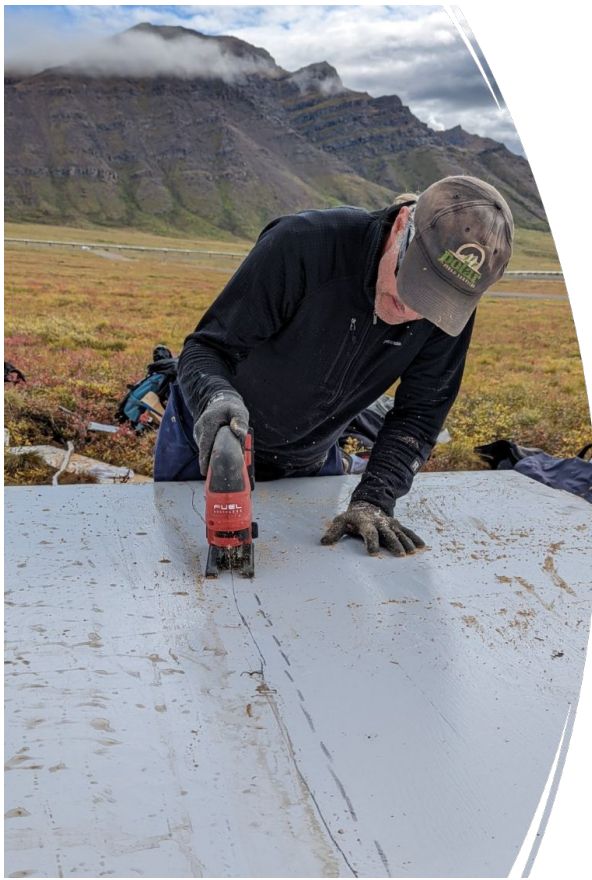


APP25 Toolik Projects

Science Support and Projects

- Bret-Harte – ITEX power system at Imnavait Creek and weir repair work
- Griffin – LTER boardwalk and vole fence maintenance and repair





APP26 Toolik Projects

Planning Ahead for Science Support and Projects

- APP26 Projects – begin thinking and planning now
- Work with Science PMs early
- Review projects during Toolik Annual Facilities Meeting
- Develop better project scope
- Find cost savings and efficiencies
- Address current concerns
- Long Range Plan
- Work together to make Toolik a great place to do Science

Patrick Proden
Alaska Operations Manager, Battelle ARO
patrick.p@polarfield.com

2025 Helo Operations Toolik Field Station

Toolik Town Hall, February 28, 2025

Toolik Helicopter Operations, 2025



- First helicopter is planned to arrive on 22 June and depart on 25 August
- Second helicopter is planned to arrive on 7 July and depart on 20 August
- ***First flights, 23 June, last flights, 24 August***
- Current estimates are 163.5 hours of helicopter flight time spread across 8 teams
- Anticipate the return of and equal level of professional service from the helicopter vendor experienced in 2024
- Bodie Davies will serve as the Helicopter Coordinator for the 2025 season. Bodie is familiar with the Toolik after several years of FEMC project support.

Toolik Helicopter Operations, 2025

- Continued focus on *safety across operations and the professional conduct of aircraft team. Building additional support across operations from a 2024 safety audit in collaboration with Battelle ARO, Alpine Air and BASC*
- Committed to a *clear channel of communication* from researchers to Battelle ARO
 - Implemented a 3-question survey to gather feedback, including a ‘Contact Me’ option for follow-up. Will utilize same tool in 2025
- Updated helicopter calendar for direct schedule requests made by researchers. **Deadline, March 14.**
- Reviewing any calendar conflicts and Close Support (CS) requests carefully to maximize helo resources. Ask team members to be mindful of constraints that are in place for this field season and the need to manage the shared use of resources collaboratively (working with Battelle-ARO, helicopter vendor and TFS staff to optimize the schedule across all teams)





Questions?

