

Murie Science Learning Center Strategic Plan 2024-2028

Executive Summary

This strategic plan outlines the Murie Science and Learning Center’s goals and objectives for fiscal years (FY) 2022-2027 and provides five-year targets for accountability. The plan lists the types of actions that may be included in the MSLC’s annual programs of work over the next five years to achieve its goals and objectives. Finally, the strategic plan communicates the MSLC’s goals, objectives, and potential actions to NPS parks and networks, external partners, schools, Alaska Native communities, and the general public. It fosters and guides projects and operations that MSLC partners pursue individually and collaboratively.

This plan was developed by the NPS Education Director for the MSLC in consultation with Denali Leadership and MSLC partners. The plan draws extensive inspiration, structure, and content from the Ocean Alaska Science and Learning Center Strategic Framework 2022-2027.

This strategic plan identifies four major goals:

Goal 1 – Partnerships

Goal 2 – Education

Audience 1 – Denali-area youth

Audience 2 – Alaskans

Audience 3 – Park visitors

Audience 4 – Remote audiences

Audience 5 – Scientists, educators, and land managers

Goal 3 – Professional Pathways to Science, Education, and Land Management

Goal 4 – Asset Management

Land Acknowledgment

The Murie Science and Learning Center (MSLC) recognizes and honors Denali’s original caretakers — the Athabascan People of Alaska who call themselves Den’a (“the people”). They are the Ahtna, Benhti Kenaga’ (Tanana), Dinak’i (Upper Kuskokwim), Denaakk’e (Koyukon), and Dena’ina. These peoples have been stewards of the land since long before it was managed by the National Park Service (NPS).

Vision

The **Murie Science and Learning Center** is a regional leader in using science stories from Denali and other Alaskan national parks to promote environmental stewardship.

Mission

The **Murie Science and Learning Center** inspires the public to understand and care about science and stewardship in Denali and other Alaskan national parks by providing high-quality educational programs and products, with an emphasis on serving youth.

Introduction

The Murie Science and Learning Center (MSLC) is a partnership framework for educational initiatives in and associated with Denali National Park and Preserve (DENA). The mission of the MSLC is to inspire the public to understand and care about science and stewardship in Denali and other Alaskan national parks by providing high-quality educational programs and products, with an emphasis on serving youth. It is part of a national effort to increase scientific literacy by showcasing research from living laboratories such as Denali.

The MSLC has no employees nor revenues; rather within its framework employees from DENA and partners collaboratively identify and serve educational audiences associated with DENA and other Alaskan national parks. Educational partners join the MSLC framework by entering into and maintaining formal and informal agreements with DENA.

MSLC partners strategically use staff, financial resources, and park access opportunities to augment, strengthen, and support their collective work. Additionally, MSLC partners collaborate with other educational operations such as non-profits, schools, Alaska Native tribal groups, and other parks and agencies to fulfill the MSLC mission. MSLC partnerships that involve financial exchanges or park access are governed through Cooperative Agreements.

Core MSLC partners include:

The **National Park Service Denali Interpretation and Education Team** fosters preservation, understanding, and enjoyment of Denali National Park and Preserve by challenging the public to explore the connections between themselves and Denali's diverse environments, and to integrate the resulting insights into their everyday lives.

Alaska Geographic works in partnership with public land agencies to connect people with Alaska's national parks, forests, refuges and conservation lands through the creation and delivery of exceptional educational products and programs.

Denali Education Center promotes understanding and appreciation of Denali through informative and inspiring programs.

The **Denali Borough School District** nurtures, empowers, and inspires today's student to positively shape tomorrow's world.

Doyon Aramark Joint Venture helps to welcome, educate, and serve over 500,000 visitors per year to Denali National Park and Preserve.

University of Fairbanks Upward Bound and T3 Alliance programs provide science and leadership-focused educational opportunities for students in middle through graduate school.

MSLC affiliations include:

- MSLC is an [NPS Research Learning Center](#) (RLC). RLCs were conceptualized within and funded using appropriations associated with the 1999 [Natural Resource Challenge](#). Envisioned outcomes of the Challenge included the establishment of 32 monitoring networks (now known as Inventory and Monitoring (I&M) Networks), each with an associated research learning center (RLC). All 32 of the envisioned I&M Networks and 18 RLCs were ultimately established.

The RLCs were located in host parks, each of which received a permanent \$225,000 base increase in order to fund the new operations. The funding was earmarked for two permanent positions – a research coordinator to promote and facilitate research, and an education coordinator to foster science communication to managers, interpreters, and public audiences.

In anticipation of receiving base funding to establish an RLC, DENA developed the MSLC partnership framework in 2003 and constructed MSLC facilities that opened in 2005. Appropriations for RLC development were terminated prior to DENA receiving a base increase for MSLC, so DENA has sought other funding mechanisms to support MSLC operations. Despite the absence of appropriated funds that enable supporting other Alaskan parks and long-range planning, the MSLC has been a longstanding and successful part of the RLC network. Its contributions to the DENA and NPS mission will be made more valuable and stable in the future if appropriated funds are provided.

- MSLC is designated an NPS Outdoor School (formerly known as Residential Environmental Learning Center or RELC) because it fulfills the mission of collaborating with universities, K-12 schools and a diverse group of research and educational organizations to promote field-science and stewardship through on-site and residential education programs. The MSLC was identified as an Outdoor School / RELC in 2020 by the Office of Inspector General of the Department of Interior.

Guiding Principles

Guiding principles establish operational standards and values and support consistent and adaptive planning and decision-making. When confronted with an issue or question, the MSLC returns to these guiding principles for direction and clarity. The principles reflect the intentions of the MSLC and inform the goals, objectives, and actions in later sections.

- Be guided by the MSLC mission with input and collaboration by the MSLC Advisory Committee and MSLC partners.

- Foster collaborative partnerships that leverage opportunities and contribute to successful projects.
- Focus the majority of MSLC’s efforts on outreach and education while also recognizing the important role that research plays in the MSLC mission.
- Promote work on cross-cutting issues that benefit multiple parks and partners.
- Increase the overall capacity and interconnectedness of science outreach in Alaskan parks.
- Leverage existing research and education resources, including cultural knowledge.
- Use measurable targets to guide and improve MSLC programs in accomplishment of objectives.

Strategic Goals

Goal 1 – Partnerships

Identify, develop, and strengthen partnerships that enhance education related to science and stewardship in Denali and other Alaskan parks.

Goal 2 – Education

Facilitate and expand opportunities to increase awareness and stewardship of Alaska’s subarctic and arctic resources through education, outreach, communication, and support.

Audience 1 – Denali-area youth

Audience 2 – Alaskans

Audience 3 – Park visitors

Audience 4 – Remote audiences

Audience 5 – Scientists, educators, and managers

Goal 3 – Professional Pathways to Science, Education, and Land Management

Invest in and implement creative and effective approaches to increase professional pathways in science, education, and land management careers.

Goal 4 – Asset Management

Maintain legal, safe, and appropriate guiding documents, facilities, equipment, and assets.

MSLC Strategic Framework – Goals, Objectives, Targets for FY 2022 – 2027

Goal 1 – Partnerships

Identify, develop, and strengthen partnerships that enhance education related to science and stewardship in Denali and other Alaskan parks.

The MSLC and the NPS recognize the importance of and value in creating robust and collaborative partnerships to address issues, share knowledge and expertise, combine resources and skills in order to effect meaningful change, support informed management decisions, and steward the resources that support communities, wildlife, and ecosystem functions in Denali and other Alaskan parks.

Partnerships are critically important—collaborations bring diverse perspectives, resources, and expertise to bear on issues within NPS boundaries and extend to associated waters and landscapes. In addition, co-creation and collaboration further extend the reach of important communications.

Indeed, partnerships lend strength and capacity while honoring participation. To that end, the MSLC is dedicated to strengthening its partnerships, working towards highly effective collaborations, and supporting new relationships to increase capacity to address issues, share knowledge through two-way exchanges, expand communication and education opportunities to reach larger audiences, and to be a model for partnership collaboration and management.

Objective 1.1 – Identify high-priority and emergent outreach programs and products to offer in collaboration with external and diverse interested parties.

Five-Year Target: The MSLC actively tracks science and stewardship outreach priorities and works to fulfill these needs with appropriate collaborators and stakeholders.

The MSLC cultivates and maintains long-term partnerships supported through legal agreements for stability, quality, and consistency of partnership-based outreach offerings.

Actions could include:

- Nurture existing partners and cultivate new partnerships to address science and stewardship outreach needs and opportunities in Denali and other Alaskan national parks.
- Consult with park and partner interpretation, education, and resource staff annually to: 1) identify key issues, 2) develop a communication strategy that will identify key science and stewardship messages, identify core audience interests, and suggest preferred media approaches, and 3) assess effective outreach and education actions.
- Participate in appropriate working groups/organizations/associations to identify, develop and maintain partnership connections.
- Continuously collaborate with NPS solicitors and leadership teams to ensure the currency and legality of all partnership agreements.

Objective 1.2 – Collaborate with partners to develop and deliver accurate, up-to-date, and consistent outreach offerings.

Five-Year Target: All Alaskan parks recognize the MSLC as an inspiring and replicable example for utilizing partnerships to support science and stewardship outreach opportunities.

Actions could include:

- Utilize partnerships to maximize the quality, reach, and effectiveness of outreach offerings (types of offerings elaborated in Goal 2 – Education)
- Identify and remove barriers to increase access to outreach offerings by utilizing a diverse array of outreach methods conveyed by a wide variety of partners.
- Identify, fund, cultivate, and support partnerships between partner organizations and parks statewide to build capacity for science and stewardship outreach.

Goal 2 – Education

Facilitate and expand opportunities to increase awareness and stewardship of Alaska’s subarctic and arctic resources through education, outreach, and communication.

Denali and Alaska’s 22 other national park units are extraordinary—they provide a unique and engaging platform for education and engagement. From dynamic features such as glaciers and landscapes alive with shifting permafrost, to the grizzly bears that hunt and forage across vast swaths of tundra, to cultural heritages of running sled dogs for transportation and gathering food from the land for survival — the MSLC helps to support the care and management of resources critical to people and wildlife. The NPS is charged with its protection for generations to come.

The MSLC recognizes its critical role in helping to educate both internal and external audiences about these important areas, their vital functions, and everyone’s role in protecting them. With strong education leaders on staff as well as working in partnership with parks and partners, the MSLC is dedicated to developing and delivering high-quality, accessible, and relevant education and outreach designed to capture hearts and minds and build knowledge and experience while providing transformational opportunities that foster long-term stewardship of these important areas.

Five-Year Target: The MSLC is regionally recognized for offering and supporting a diverse range of education and outreach opportunities that promote science and foster stewardship in Denali and other Alaskan parks.

All audiences that engage with MSLC materials, products, and programs experience robust learning opportunities that provide foundational and current scientific and cultural knowledge associated with Denali and other Alaskan parks.

All educational offerings supported by the MSLC are high quality, which is represented by their being accurate, up-to-date, audience-appropriate, audience-centered (participants make personal connections between the educational content and their own homes and lives), culturally relevant, engaging, available through multiple methods of access, and supportive of personal self-identity and diverse styles of learning and knowing.

All MSLC programs are explicitly connected to Denali’s interpretive themes (extensive natural ecosystems, wildlife and wildlife habitat, Denali the mountain, wilderness values and

recreation, people and the land, and dynamic change) as well as cross-cutting issues relevant to all subarctic and arctic environments.

All MSLC educational offerings promote environmental stewardship, cultural connections, Leave No Trace principles, and the safe exploration of conflicts and tensions if and when they arise.

All MSLC educational offerings provide opportunities for positive (fun, engaging, inspiring) connections to public lands in the hopes of fostering future pro-environmental behavior and support of public lands.

All MSLC educational offerings are clearly advertised and accessible to all potential audiences and participants.

All MSLC programs and products are regularly reviewed and updated for quality.

The MSLC works with Alaska Native tribal partners to explore traditional forms of knowledge associated with subarctic and arctic science and stewardship and incorporate associated themes and information into all communication products and efforts.

Because education is the primary mission of the MSLC, the Education goal is sub-divided to identify five distinct, high-priority audiences:

Audience 1 – Denali-area youth

Audience 2 – Alaskans

Audience 3 – Park visitors

Audience 4 – Remote audiences

Audience 5 – Scientists, educators, and managers

Audience 1 – Denali-area youth

Five-Year Target: All Denali-area youth are served directly or indirectly by MSLC programs and products.

Denali-area teachers and educators recognize and utilize the MSLC as a valuable resource to increase science and stewardship outreach capacity.

Actions could include:

- Offer a diverse array of educational programs to local youth spanning from pre-Kindergarten through high school, lasting from one hour to multiple days, and targeting a broad range of interests and aptitudes. Programs are designed to build upon past experiences.
- Strengthen connections with local schools to help preK-12 teachers in the Denali and Matanuska-Susitna Borough School Districts (DBSD and MSBSD) and Nenana City School bring their classes to Denali and Denali to their classrooms.

- Offer free or affordable extracurricular learning experiences for local youth including summer camps and expeditions, field trips, and summer and school-year internships.
- Expand programs into areas historically less well served by MSLC partners including Fairbanks North Star and Matanuska-Susitna Boroughs.

Audience 2 – Alaskans

Five-Year Target: Thousands of Alaskan youth are served directly or indirectly by MSLC programs and products each year.

Dozens of Alaskan educational organizations recognize and utilize the MSLC as a valuable resource to increase science and stewardship outreach capacity.

An increased number of underserved Alaskan audiences including urban, low income, Alaska Native, military, and disabled, are served by MSLC programs and products.

Actions could include:

- Offer immersive, science-focused frontcountry programs for Alaskan youth and school groups.
- Offer extended skill-building and science-focused backcountry programs for Alaskan youth.
- Offer in-depth park science immersion experiences for Alaskan adults and families.
- Offer and support teacher workshops and Inservice days for Alaskan teachers.
- Offer park experiences for Alaskans with disabilities.
- Work to mitigate barriers to access by collaborating widely with partners to seek out, partner with, and offer education and outreach programs at low or no cost to underserved audiences including urban, low income, Alaska Native, military, and disabled.
- Develop and /or implement engagement tools to encourage retention and meaningful inclusion of all Alaskans in NPS programs and opportunities.
- Provide funding, programmatic support, and staffing expertise to educational programs in other Alaskan national parks.
- Optimize the use of MSLC facilities (MSLC main building, Murie Hall, Teklanika Field Camp) to enhance the learning opportunities of target audiences.
- Build a MSLC student bunk house in Denali to enable classes and academic groups from Fairbanks and Wasilla areas and other parts of Alaska to more easily visit Denali for field trips.
- Broaden the reach and impact of educational initiatives by collaborating with educational partners statewide to highlight and advance an annual theme or target audience.

Audience 3 – Park visitors

Five-Year Target: All visitors to Denali, and some visitors to other Alaskan parks, have enhanced learning experiences that can be attributed to MSLC educational programs and products.

Actions could include:

- Offer free, self-serve educational opportunities such as Junior Ranger books and Discovery Packs to all young Denali visitors.
- Offer free, in-person programs such as guided walks and science and stewardship activities for kids and families.
- Assist with the creation and display of high-quality exhibits featuring park science at the MSLC and other visitor centers, using contractors when appropriate.
- Generate revenue to support free educational programming by supporting partners in offering high-quality science programs such as learning vacations, bus excursions, guided hikes, and indoor presentations for paying visitors.
- Support the production and availability of high-quality publications and products that illuminate Denali park science and educational opportunities.

Audience 4 – Remote audiences

Five-Year Target: All K-12 students in the United States have access to high-quality digital learning opportunities offered by Denali and MSLC partners.

All teachers in the United States have the opportunity for a park ranger to visit their classroom remotely.

All visitors to Denali science and education webpages have access to diverse, comprehensive, up-to-date, audience-appropriate content and learning opportunities.

Actions could include:

- Offer high-quality digital information and activities for youth including Junior Ranger activities, student readings, and other media products.
- Offer live distance learning programs to K-12 classrooms nationwide.
- Assist with ensuring quality, currency, and audience appropriateness of all science and education-related content on Denali-NPS and other MSLC-associated websites.
- Respond to education-related inquiries to the Denali park information lines with personalized, informative, audience-appropriate educational materials.

Audience 5 – Scientists, educators, and land managers

Five-Year Target: Scientists, educators, and land managers associated with Denali and other Alaskan parks recognize and utilize MSLC offerings to enhance their own science and stewardship knowledge and professional capabilities.

Actions could include:

- Coordinate, offer, and leverage resources to support science symposia and trainings for teachers, educators, and NPS and MSLC partner staff engaged in visitor outreach, including trainings on how to effectively communicate science and scientific results.
- Develop and offer asynchronous learning opportunities such as resource briefs, web articles, social media posts, current real-life science data sets, and other media products to educators, scientists, and land managers.

- Provide MSLC meeting and work spaces, lodging, outreach opportunities, and other in-kind support for visiting scientists and educators.
- Utilize partnerships to leverage efforts to communicate science (e.g., coordinate social media posts, partner for teacher/seasonal employee trainings, collaborative messaging, etc.).
- Attend state and national conferences, Alaska Native community gatherings, and other meetings and trainings, as feasible, in order to exchange knowledge regarding outreach efforts pertaining to subarctic and arctic science and stewardship.
- Offer resources, expertise, and staffing support to Education Specialists and education partners in other Alaskan parks.
- Consult with parks and researchers on effective outreach/education components of research projects and in development of communication products associated with research in the parks.

Goal 3 – Professional Pathways to Science, Education, and Land Management

Invest in and implement creative and effective approaches to increase professional pathways in science, education, and land management careers.

The MSLC recognizes the opportunity to support professional pathways into careers connected to science, education, and land management. Through the direct support of internships and professional development for individuals early in their careers, as well as leveraging hiring authorities and building professional networks, the MSLC seeks to create meaningful ways for students and early career professionals to gain access to opportunities and career positions focused on these subjects.

Objective 3.1 – Foster and facilitate professional-experience opportunities for early-career educators, science communicators, and land managers.

Five-Year Target: The MSLC supports professional experience opportunities for early-career educators, science communicators, and land managers.

Actions could include:

- Provide and support internships related to education, science communication, and land management among Alaskan parks and partners.
- Provide opportunities for Alaska’s NPS Academy interns to learn about and experience the work of MSLC partners.
- Utilize and advocate for the use of diverse hiring authorities to fill positions at and associated with the MSLC.
- Provide resources and support to mitigate barriers to diverse inclusion in science and conservation internships and career opportunities.

Objective 3.2 – Use the MSLC network of multi-divisional expertise to provide cross-divisional learning and growth opportunities for existing employees.

Five-Year Target: MSLC supports a diverse range of learning and growth opportunities for its NPS and partner staff.

MSLC-associated staff feel capable/empowered/encouraged to actively engage in reflection, knowledge sharing, and relationship building in respectful environments.

Actions could include:

- Provide coaching, evaluation, and training opportunities for MSLC and partner staff on an annual basis.
- Encourage professional development among existing MSLC-associated staff to help support knowledge of science, research, education, audience engagement, cultural competencies, etc.

Objective 3.3 – Facilitate exposure to land management career opportunities for K-12 students.

Five-Year Target: All K–12 students within the MSLC sphere of influence have had the opportunity to interact and engage with land management career opportunities.

Actions could include:

- Facilitate opportunities to take K-12 students into the field to experience land management career opportunities.
- Provide opportunities for students to interact and engage with park and partner careers.
- Participate in student workshops and support internships related to land management careers.
- Work with local schools to inspire and train young scientists, educators, and land managers.

Objective 3.4 – Provide opportunities for development and recruitment of local individuals and Alaska Natives into NPS science, management, and educational positions.

Five-Year Target: Increase percentage of local community members and Alaska Natives working in education, science, and land management careers.

Actions could include:

- Utilize hiring authorities and other opportunities to develop and recruit local individuals into MSLC-associated staffing positions.
- Explore diverse options and venues for local individuals to engage in NPS science, management, and educational work and learn about associated career opportunities.
- Develop and/or implement engagement tools that mitigate barriers to access and increase meaningful participation in NPS programs and opportunities.

Goal 4: Asset management

Maintain legal, safe, and appropriate guiding documents, facilities, equipment, and assets.

Appropriate guiding documents, facilities, and assets are the foundation for legal and high-quality educational operations. The MSLC strives for excellence in maintaining the many valuable assets necessary to accomplish its mission.

Objective 4.1 – Manage guiding documents and plans.

Five-Year Target: Ensure that MSLC has appropriate, adequate, current, and legal guiding documents and plans at all times.

Actions could include:

- Maintain current and legal agreements and guiding documents, including updating all MSLC General Agreements to Cooperative Agreements by 2023.
- Develop MSLC staff and student housing plans and agreements.
- Review and update the MSLC strategic plan every five years.
- Review and update MSLC goals and workplans annually.

Objective 4.2 – Manage facilities, equipment, and assets.

Five-Year Target: Ensure all MSLC facilities, equipment, and physical and digital assets are appropriate, adequate, clean, safe, and functional at all times.

Actions could include:

- Maintain clean, safe, and functional facilities including the MSLC main building, the Murie Hall, Teklanika Field Camp, MSLC partner and visiting researcher/educator housing, and partner facilities by extension.
- Maintain clean, safe, and functional vehicles for transporting educational groups and staff.
- Maintain attractive, accessible, clear, and comprehensive online platforms including webpages and social media accounts.
- Maintain well-organized and high-quality education equipment including camping equipment and educational props and supplies.
- Maintain well-organized and high-quality digital assets including SOPs, program materials, curricula, activities, and photos.