

JESSICA S. MCKAY, E.I.T.

EXPERIENCE

Cold Climate Housing Research Center

Fairbanks, AK - Project Manager (Part-Time, Hybrid)

November 2024 - December 2025

- Restructuring and development of the CCHRC Project Management Office. Develops documents and procedures for project management. Developed and analyzed a company cost benefit analysis for use in strategic planning. Vision and development of an Alaska wide Housing Design Depot for facilitation of more affordable and efficient housing.

Alaska Adaptable Solutions Copper Center, AK – Project Engineer (Owner)

March 2024 - Present

- Specializing in construction projects in remote and rural Alaska. Including design review, site logistics, regulatory compliance, and construction oversight.

Alaska Adaptable Housing, LLC Fairbanks, AK - Co-Founder

April 2022 - March 2024

- Developing a standardized “kit-of-parts” building system with a shared online housing design innovation platform. Promoting community led building initiatives while maximizing the use of local materials, expertise, and labor. Patent Pending foundation design for remote construction.

Cold Climate Housing Research Center/National Renewable Energy Laboratory Fairbanks, AK – Project Manager II (Full Time)

February 2021 - April 2022

- Oversight of projects including, Wainwright Net-Zero Childcare Facility, Sustainable Arctic Manufacturing and Innovation Initiative and the Resilient Nunapitchuk Public Safety Office Building. Collaboratively develops innovative building designs as well as advanced manufacturing techniques for use in residential construction with emphasis on Arctic climates. Project costs ranged from \$100,000 to \$10,000,000.

Valdez Fisheries Development Association, Inc. Valdez, AK – Projects Manager

July 2018 – January 2021 (Full Time)

- Oversight of process piping and drain system improvements, processing equipment replacement, multiple building replacements, habitat evaluation, land agreements, and net pen complex mooring system maintenance and storage for the VFDA, comprised of Solomon Gulch Hatchery, Solomon Falls Seafood and Cold Storage Facility, and the Robe Lake Conservation Project. Project costs ranged from \$500 to over \$8,000,000.

City of Valdez, Valdez, AK — Project Manager

August 2017 – July 2018 (Full Time)

- Oversight of Valdez Providence Medical Center Projects, Valdez Swimming Pool Renovation, Valdez Container Terminal Security Gate Replacement, Elementary School Window and Walkway Replacement, Animal Shelter Kennel and Drain Renovation, Library Interior Renovation, Second Sewer Force Main from pre-design through closeout. Project costs ranged from \$250,000 to \$8,000,000.

W.L.Gore & Associates, Flagstaff, AZ — Process Engineer

July 2015 - August 2017 (Full Time)

- Supported day-to-day production issues including: assessing and ordering new tooling with internal and external professionals, identifying and reducing errors in the manufacturing process, including operator training, intern development and quality control. Identified engineering needs, designed, and validated; various pieces of equipment for the production of Gore Occluders to comply with international standards. Provided cost estimates and specifications for the implementation of new equipment. Project costs ranged from \$50,000 to \$6,000,000.

EDUCATION

University of Alaska Fairbanks, Fairbanks, AK - Master's of Science - Thesis (MS) Structural Engineering and Material Science

January 2025 - Present (Graduation Spring 2027)

Northern Arizona University, Flagstaff, AZ — Bachelor's of Science in Engineering (BSE) Mechanical Engineering with minors in Electrical Engineering and Physics

January 2012 - May 2015

Pima Community College, Tucson, AZ - Engineering Courses

August 2009 - December 2010

Prince William Sound Community College, Valdez, AK — Dual Credit Courses

August 2006 - May 2008

Valdez High School, Valdez, AK — High School Diploma

August 2004 - May 2008

VOLUNTARY POSITIONS and AWARDS

Coral P. Sales Company, Excellence in Arctic Engineering Research Award, UAF Local

Cementitious Composites Research - October 2025

Arctic Innovation Competition, 2025 Main Division Winners - Alaska Adaptable Housing - Foundation System - April 2025

National Renewable Energy Laboratory - Key Player Award - December 2021

City of Valdez - Comprehensive Plan Advisory Committee Member – August 2018 - January 2021

Valdez Co-Op Preschool - Advertising Chair and Yoga Instructor - May 2019 to August 2020

Advocates for Victims of Violence - Young Woman of Distinction Award - 2018

Ambassadors for the Colleges of Engineering, Forestry, and Natural Sciences (NAU)- President -2013-2015 (member since 2012)

LICENSURE, TRAINING, and REGISTRATION

30 hrs Project Management Training - Master of Project Academy - February 2024

200 Hr Yoga Teacher Certification - Yoga Alliance - August 2020

20 hrs Project Management Training - Master of Project Academy - April 2020

Construction Management Training - CMAA - March 2019

Electrical Schematics and Diagrams - TPC Training - April 2020

OSHA 10 Construction Industry Certification - OSHA - January 2020

OSHA 10 General Industry Certification - OSHA - October 2019

Engineer in Training Certification - NCEES - February 2018

AK-CESCL Certification - Associated General Contractors of Alaska - Oct 2018