

March 2018

# ALASKA CAPITAL ENGINEERS

## Upcoming Events

March Luncheon (**3/21/18**) –  
AEL&P, Wayne Jensen on the  
Capitol Refit

April Luncheon (4/11/18) – AEL&P,  
Speaker TBD

May Luncheon (5/9/18) – AEL&P,  
Speaker TBD

Halibut Feet (6/1/18) – Sandy  
Beach

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## November Menu Lunch Buffet

March 2018  
Catering by Abby's Kitchen  
\$15 per person  
AEL&P

Contact Mike Story to submit ideas for  
luncheon Speakers

# ASCE Juneau Branch President's Message

Alaska Capital Engineers,

February was a busy month beginning with the APDC Legislative Fly-in and then our banquet. For me the highlights of the Fly-in were getting to hear Fred Nelson, ASCE Region 8 Governor, give his talk on "Engineering in a Disaster Zone: FEMA Deployment to hurricane Harvey and Oso Mudslide" at the Mendenhall Valley Library. Before and after his talk, I went through some of the exhibits at the Discover Tech exhibit at the Mendenhall Library with my son Ryan. The incandescent light bulbs really got our attention and we have since completed converting to LED's in our home. The exhibit is here through April. I want to get back to see more of the exhibits and I hope you get a chance to do the same.

I had a few highlights from the banquet this year:

- Project of the year recognition went to two excellent projects designed by PND for CBJ Docks and Harbors. The Douglas Boat Harbor was runner up project of the year and the Juneau Cruise Ship Berth was our project of the Year. The Juneau Cruise Ship Berth also received Project of the Year honors at the Engineers Week Banquet in Anchorage the same evening as our banquet. For an "Alaska Business Monthly" article on all the projects up for the Anchorage award see: <http://www.akbizmag.com/Alaska-Business-Monthly/February-2018/Engineering-Excellence--Project-of-the-Year-Submissions>. I believe this project has an excellent chance for recognition at upcoming ASCE regional and national project of the year evaluations. I also enjoyed John Demuth's comments upon accepting the award.
- Richard Pratt, PE, was an excellent Engineer of the year recipient and I especially enjoyed his comments and his introduction by Ken Fisher, ADOT Division Director.

(continued on next page)

# ASCE Juneau Branch President's Message (Continued)

(continued from previous page)

- The key-note speaker, Commissioner Mike Navarre, Alaska Commerce, Community & Economic Development, gave a concise, informative and entertaining talk on economic development in Alaska and how taxes could encourage the State to support more diversification. At least that was my take away. It doesn't seem likely the legislative leadership will act this year, but hopefully next year brings some kind of stable long term fiscal plan for Alaska.
- The generosity of local engineering firms to support ASCE, ASPE and our profession. If you get the chance, please help me in thanking our banquet scholarship sponsors PDC, PND, Tetra Tech, DOWL, Haight and Associates and Wilson Engineers.

I want to welcome a new newsletter sponsor this month proHNS, you should find their ad toward the back of this newsletter.

I have heard an earlier lecture by Mr. Wayne Jensen, AIA, on the State of Alaska Capitol Building Seismic Renovation project. I understand it is updated and better; so I think we are all in for a treat and I hope to see you at the luncheon on Wednesday.

Sincerely,  
Michael C. Story, PE  
ASCE Juneau Branch President



# Wayne Jensen on the Capitol Refit



Wayne Jensen is the Sr. Principal with Jensen Yorba Lott Architects. He has been involved in over 30 renovation and remodel projects in the Alaska Capitol including the recently completed Seismic Retrofit and Exterior Renovation. Wayne also has been involved in many other historic renovation projects, including work on the Alaska Governor's House. He has an interest in history and is a member of several historic societies. In 2014 he was appointed by the Governor to the Alaska Historical Commission. He is currently serving a second term as the architect member of the commission.

The presentation will feature historic drawings and photos of the original planning, design and construction of the building from 1912 through the grand opening in 1931. It will also include information and photos of the recent exterior renovation project. The recent project involved several years of planning and 4 years of construction from 2014 through 2017. The project reinforced the structure of the building for earthquakes and replaced the exterior envelope to improve energy efficiency and restore the historic character of the building. The construction cost for the original building was \$1 million the construction cost for the renovation was \$36 million.



# 2017 ASCE Juneau Branch Engineer of the Year



Richard's career began about 34 years ago when he was hired by CALTRANS as a newly graduated engineer from the University of California, Davis. He subsequently worked designing bridges for a county and consulting firm in California before coming to Alaska about 24 years ago to work for the DOT&PF. Richard has been the Chief Bridge Engineer of Alaska for 18 years.

As Chief Bridge Engineer for the Alaska Department of Transportation & Public Facilities Richard is responsible for managing four functional groups (two structural design, one load rating/bridge management, and one hydraulics) to ensure the safety of Alaska's bridges. To accomplish this in 2017, he oversaw the delivery of plans and specifications for 12 new and replacement bridges and miscellaneous structures. His staff managed and completed approximately 520 routine bridge safety inspections, 60 fracture critical, 40 underwater, 40 low water, 20 hydraulic/scour, and 30 special bridge inspections in conformance with Federal Highway Administration (FHWA) bridge inspection mandates. Due to Alaska's short summer, these inspections were completed within less than 4 months.

Under Richard's leadership and guidance, the DOT&PF received approval from the FHWA in July 2017 to adopt the Alaska Bridges and Structures Manual as the official DOT&PF policy document for federal-aid bridge projects in Alaska. This manual covers every aspect of designing, estimating, rehabilitating, inspecting, testing, and load rating highway bridges. Much of this manual includes Alaska-specific policy for topics not covered by the national bridge design codes; for example, design parameters related to permafrost, cold material behavior, seismic design, and issues related to construction in remote Alaska.

**Richard Pratt, P.E., S.E.,**  
Chief Bridge Engineer,  
Alaska Department of  
Transportation and  
Public Facilities





# 2017 Juneau Branch Engineer of the Year Banquet Photo



Engineer of the Year Richard Pratt is third from the right. Others from left to right are Ken Fisher, ADOT Director; David McAdoo, Bridge Design; Mary McRae, Bridge Design; Nick Murray, PE, Bridge Design; Leslie Daugherty, PE, Bridge Design; Jesse Escamilla, PE, Bridge Design; and Andrew Wells, Bridge Design.



# 2017 ASCE Juneau Branch Project of the Year

## Port of Juneau Cruise Ship Berths

The existing cruise ship docks owned by the CBJ Docks and Harbors department were not meeting the needs of the current and future cruise ships utilizing the port. The lack of proper facilities for the larger cruise ships prevent the larger vessels from using the CBJ docks, reducing the number of passengers disembarking to visit the town each day. Also close proximity to the shore prevented the use of the seawalk while vessels were moored at the docks. The two new floating berths have now moved the ships off-shore to allow full access to the seawalk while vessels are in port and each berth will accommodate a 1000-1100' long vessel which was not possible with the existing dock structures. The Port of Juneau Cruise Ship Berth project utilized many design elements that helped provide a cost effective upgrade to the existing cruise ship docks in downtown Juneau.



# 2017 Juneau Branch Project of the Year Banquet Photo



Project of the Year Recipient John DeMuth, PE, is second from the left and accepted the award on behalf of PND Engineers for the Juneau Cruise Ship Berth. Other from the left are Ben Haight, PE, Haight & Associates, Electrical Engineer; Erich Schaal, PE, Docks and Harbors; Gary Gillette, AIA, CBJ Docks and Harbors; and Monica Blanchard, PE, Manson Construction.





# Thank You 2018 ACE Banquet Sponsors!

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# Alaska Capital Engineers' Halibut Feed

Date/Time:

Friday, June 1, 5-7 pm

Location:

Log cabin at Sandy Beach  
(Savikko Park)

Thanks to Sandy  
for providing the halibut!



# Juneau STEM Coalition



The Juneau STEM Coalition is a volunteer community group whose mission is to support Juneau to develop lifelong Science, Technology, Engineering, and Math (STEM) skills. <https://juneaustem.org/>

We are a diverse group of people under a loose “STEM” umbrella. We seek to effect incremental and transformational change within the Juneau School District. We want to support our students to be innovative, collaborative, empathetic, resourceful, and persistent now and as adults. We want them to struggle – in the best sense of the word – with challenging and intriguing projects that integrate in real and meaningful ways across the traditional academic disciplines and throughout the Juneau community. We want them to speak up for themselves and for others.

STEM education is associated with many beneficial qualities, including inquisitiveness, critical thinking, creativity, problem solving, grit, collaboration, and innovation.

***The Juneau STEM Coalition is working with teachers and STEM experts to bring real-life connections into Juneau classrooms, via [S.E.E. \(SouthEast Exchange.\)](#)***



# Discover Tech at the Mendenhall Valley Library

**January 10 to April 6**

In addition to the exhibit, the library will be putting on programs and events for all ages geared around STEM topics. These include coding classes, a Lego cantilever exercise, science book clubs, family nights, and more. Juneau Public Libraries is working closely with the Juneau School District to facilitate a school field trip for all 92 elementary school classrooms. Each field trip will consist of time to explore the exhibit, plus a hands-on, grade appropriate science experiment. If you're interested in volunteering with the exhibit, please contact Andrea (Andi) Hirsh at [andrea.hirsh@juneau.org](mailto:andrea.hirsh@juneau.org) or 586-0442.

Explore the world of engineering at the library!

Build an arch, design circuits,  
create a water filtration system,  
and much more!

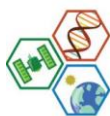
## all ages welcome!

Discover Tech: Engineers Make a World of Difference, a traveling exhibition for libraries, is part of the STAR Library Education Network (STAR\_Net) led by the National Center for Interactive Learning at the Space Science Institute.

Exhibit partners include the American Library Association, the Lunar and Planetary Institute, and Afterschool Alliance. Discover Tech is supported through a grant from the National Science Foundation.



JUNEAU PUBLIC  
LIBRARIES



discover  
TECH



Juneau Chapter  
Alaska Society of Professional Engineers



# Meet Janice Simmons, EIT, PDC Engineers



Janice Simmons, EIT  
Facilities | Structural Engineer-in-Training  
Juneau-Lemon Creek

EMPLOYEE  
*Spotlight*

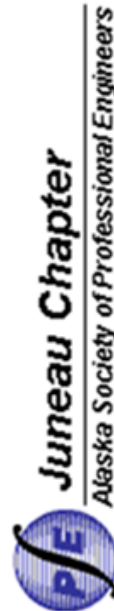
Janice grew up in Valdez, Alaska and is a graduate of Montana State University. Even though both parents are Mechanical Engineers, Janice decided to take the road less traveled by pursuing a degree in Civil Engineering.

Shortly after graduation, Janice relocated to the state of Washington where she honed her skills as a Structural EIT. After several years, she decided to return to her home state to be closer to her tight knit family.

Growing up in Valdez, she loved the carefree lifestyle that a small town offers. She and her family spent the summers on their boat, playing board games and watching movies.

When not working, Janice spends her free time baking (anything sweet), hiking and streaming Netflix (Orange is the New Black, Once Upon a Time, Burn Notice). With more than 130-miles of hiking trails in Juneau, Janice will have plenty of opportunities to explore the temperate rainforest with her two pups, Pepper (a 4-year old Blue Heeler) and Clover (a 2-year old Border Collie).

Welcome to the family Janice!



# Meet John Malaby, EIT, PDC Engineers



Meet  
*John*

**John Malaby, EIT**  
Utilities | Civil Engineer-in-Training  
Juneau-Lemon Creek

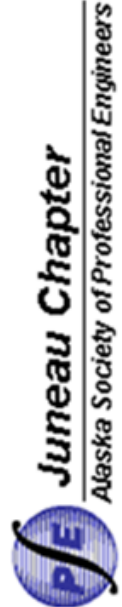
**EMPLOYEE**  
*Spotlight*

John Malaby was born and raised in Juneau. He attended college at the University of Alaska, Fairbanks where he obtained a degree in Civil Engineering. While his engineering interests include civil, structural and geotechnical, his true passion is structural design.

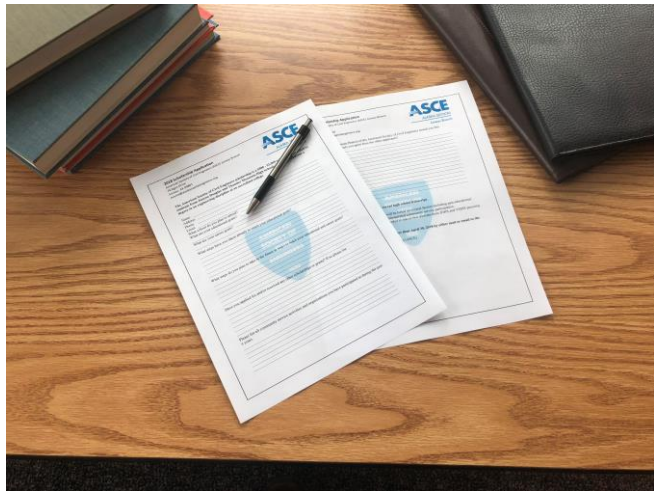
Prior to joining the PDC family, John spent 10-years in the construction industry working his way up from a carpenter apprentice to journeyman status on several projects in the Juneau area. Some of this work brought him into direct contact with PDC/R&M, which inspired him to pursue a career with PDC.

Some of John's favorite childhood memories include road trips to the lower 48 and all things Christmas. When not working, he spends time with his tight knit family hiking, biking, rock climbing, swimming, hunting and watching episodes of Top Gear or Grand Tour. John also shares his love of Christmas with his wife Staci and their two daughters, 8-year old Ella and 1-year old Laney.

Welcome to the family John!



# ASCE Juneau Branch Scholarship



The American Society of Civil Engineers Juneau Branch Scholarship is a **\$500 scholarship** awarded to students from Juneau Douglas and Thunder Mountain High Schools intending to pursue a degree in an engineering discipline at an accredited college.

Selection will be based on several factors including past educational performance, engineering goals and demonstrated community service participation. \$500 scholarships may be awarded to one or two students from JDHS and TMHS pursuing engineering degrees. The scholarships will be paid directly to the institution where the student matriculates.

Applications should be submitted no later than **April 30, 2018**. An application form can be downloaded from the ASCE Juneau Branch website: <http://branches.asce.org/juneau/resources>





# Matt McGuan, PE, ASCE Juneau VP, Juneau Empire Opinion

## Level the Playing Field for Responsible Development Near Salmon Streams



One of the first large projects I ever worked on as an engineer involved over two years' worth of permitting and public input to rebuild Main Street in Petersburg. At the time, it seemed like a long arduous process for a few hundred feet worth of road. But looking back, it was well worth the trouble. The roadway in question was critical to the community's economic and social fabric. In the end, those two years of work helped to minimize economic disruption, protect the environment, and ensure that the community received the best possible finished product.

On that project, we were required to be responsible. But there are other situations where businesses and developers are left to make their own choices. Standards are ill-defined or don't exist at all. In these cases, what constitutes responsible development is in the eye of the beholder. "Compliance" may be a factor of how politically connected you are. [Read More >>](#)



# Andrew Wells, PE, Juneau Empire Opinion

## Infrastructure Resiliency is Key for Alaska

I recently moved to Juneau from Port Arthur, Texas.

In August, my area received more than 50 inches of rain over the course of four days during Hurricane Harvey. This storm put our infrastructure to test. Despite the fact that the largest oil refinery in North America is located in Port Arthur, the pump stations serving my community of 35,000 ran out of diesel fuel due to a lack of ground transportation. Consequently, 80 percent of the city was flooded, with some homes inundated with more than 10 feet of water. In other areas, the storm isolated communities due to bridge failures and the third largest waterway in the United States was closed for nearly two weeks. To me this highlighted the importance of resiliency in infrastructure.

In Alaska, our ports, harbors, airports and sometimes single bridges are what connect us to the outside world. They allow us to import food and fuel as well as export our own goods. Sadly, these lifelines have been underfunded for the last number of years, delaying maintenance and new construction. Several days ago, a magnitude 7.9 earthquake hit off the coast of Kodiak. Fortunately, no one was injured and very little (if any) significant infrastructure was damaged. However, this did not have to be the case. In Alaska, natural disasters like these can happen anywhere without notice and our communities need to be prepared for their eventuality. [Read More >>](#)

### Professional Development Hours

The ASCE Juneau Branch will provide electronic continuing education development hour certificates for those who are interested in tracking development hours received by attending the Alaska Capital Engineers Luncheons to hear speakers present on engineering topics. Certificates can be found on the branch webpage: <http://branches.asce.org/juneau/>

### ASCE Juneau Branch Website

Bookmark this website for easy access to the events calendar, PDH certificates, new and archived newsletters, contact information and much more: <http://branches.asce.org/Juneau/>

For questions or concerns regarding the Juneau Branch ASCE website, please contact Ethan Roemeling.

### AccessEngineering

Developed in partnership with McGraw-Hill Education, ASCE members now have FREE and unlimited usage of this award-winning engineering reference tool: [www.asce.org/AccessEngineering](http://www.asce.org/AccessEngineering)



# ASCE News Brief

## ASCE New Faces of Civil Engineering – Professional for 2018



## ASCE 2018 New Faces of Civil Engineering Boast Wide Array of Interests, Achievements

February 21, 2018

Think of it a bit like ASCE's 10 under 30.

Each year, ASCE identifies an exceptional group of rising talents as the New Faces of Civil Engineering, shining a spotlight on 10 outstanding young professionals who exemplify the future of the profession.

This year's class of young professional New Faces, each 30 or younger, boasts a diverse array of interests and achievements.

Some are already managing their own civil engineering projects. Others have traveled the world doing civil engineering service work. Many are passionate about student outreach, inspiring the next generation of New Faces.

[Read More >>](#)



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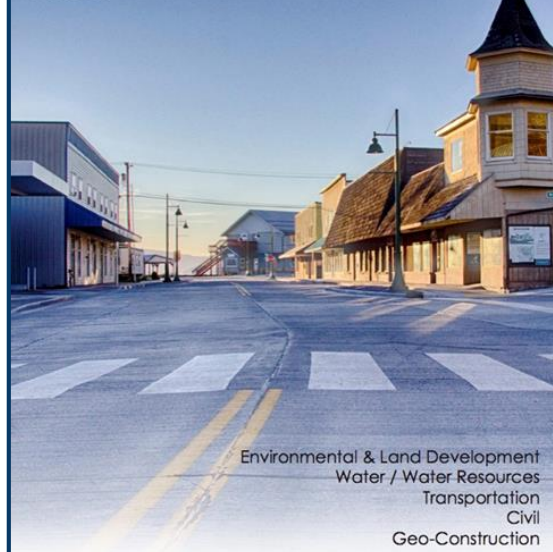
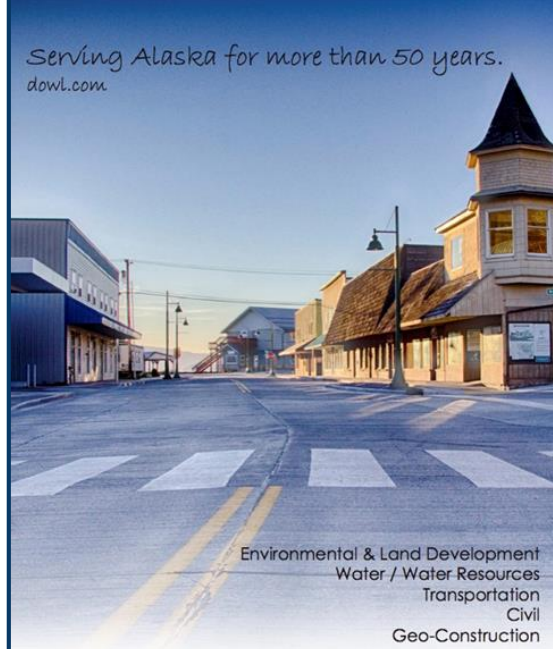
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**Juneau Chapter**  
Alaska Society of Professional Engineers

## **Membership and Renewal**

Thank you for your continued membership and support for ASCE and NSPE. Our professional organizations provide a great opportunity to network with other members of the engineering profession. Select the links below for society membership information.

[ASCE Membership Information](#)

[NSPE Membership Information](#)

To support Alaska Capital Engineers, consider sponsoring this newsletter. Contact Mike Story for more information.

### ***2017-2018 Alaska Capital Engineers Officers***

#### **ASCE**

President - Mike Story, PE  
Vice President – Matt McGuan, PE  
Treasurer - Ethan Roemeling, EIT  
Secretary - Eric Antrim, PE  
Past President - Justin Kanouse, EIT  
Emeritus - Don Gotschall, PE

#### **Special Committees**

DiscoverE Week - Please Volunteer  
Halibut Feed - Please Volunteer

#### **ASPE - Alaska Society Contacts**

Past President – Angela Smith, PE  
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President Elect – Jeanne Bowie, PE  
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