To View the PDF Version, Click Here

March 2024

March 2024 Equilibrium

State Leadership

President
Tyler Winkley (SE)

Vice President
Heather Kline (SP)

Treasurer
Owen Kohashi (SE)

Secretary
Jessica Jenness (SE)

Past President
Daniel Sumerfield (SE)

Trustees
Owen Kohashi (SE)
Tyler Winkley (SE)
Jessica Jenness (SE)
Daniel Sumerfield (SC)
Matt Leslie (SC)
Jared Plank (SW)
Heather Kline (SP)
Matt Hoit (SP)

March 2024 Issue

1. Preview of Seattle Meeting: Mass Timber Taking Root
2. WJE Collapse Investigation of Champlain Towers South
3. Task Group Formed to Develop Statewide Code Change Proposal
4. SWR Recommendations Expected to be Adopted in 2025
5. REMINDER: Register for WAsafe Building Safety Evaluation (ATC 20/45 Plus) Classes
6. SEFW Funds K-12 Popsicle Stick Bridge Competitions
7. SEAW Seattle Chapter Nominating Committee Notice
8. Interested in Joining SBCC's Technical Advisory Group?
9. Calendar
10. Membership Postings
11. Job Opportunities

Preview of Seattle Meeting:

Mass Timber Taking Root

Date: Tuesday, March 19th, 2024
Time: 4:00 - 5:15 PM

Location: Zoom Webinar
You will receive an email directly from Zoom with your unique URL after registering prior to March 19
1 PDH

Registration Fees:
- SEAW Members & Students - Free!
- Non-Members - $15

Register Today!



Mass timber use is growing and is at the forefront of sustainable construction. Join us for this presentation which will assess the current state of the mass timber industry in North America, exhibiting project

success stories, points of innovation, and where challenges still exist. Timberlab's perspective comes from delivering mass timber projects across the US as well as projects in Seattle, and the presentation will provide insights and lessons learned on several recent projects including the Heartwood 8-story Tall Wood workforce housing project in Capitol Hill and the Northlake Commons Office/Lab building situated on Lake Union.

Presenter:
Hans-Erik Blomgren, PE, SE, P.Eng., Struct.Eng.



Hans-Erik is Technical Director at Timberlab providing engineering design services for mass timber building projects. Timberlab is a Portland, Oregon based mass timber contractor that provides sourcing, design, fabrication, and install services on building projects across the United States. During his career, Hans-Erik has worked as a structural engineering consultant on many large-scale commercial building projects and also worked in manufacturing as a cross-laminated timber product development manager. Hans-Erik currently represents Timberlab on the American Wood Council Wood Design Standards code development committee and the ANSI/APA PRG 320 Committee for Cross-Laminated Timber.

WJE Collapse Investigation of Champlain Towers South

By Turner Solterman

Whenever major structural collapses occur, the inevitable investigations and lessons learned can be years in the making. Fortunately for us, Matthew Fadden (PhD, P.E., Associate Principal at Wiss Janney Elstner Associates) presented a fantastic summary of the investigation that WJE performed on the Champlain Towers South collapse in Surfside, Florida. Dr. Fadden was the featured speaker at the SEAW & WA ACI Joint Meeting that took place at the end of February.

Describing himself as a "recovering academic," Dr. Fadden and the extended WJE office network were hired by the receivership representing the Champlain Towers homeowner's association to determine the most probable causes of the structural collapse. Parallel to this effort, various government agencies were responsible for collecting evidence and compiling their own reports, but the WJE team had unparalleled access to original construction documents and records of the multiple renovations and maintenance projects associated with this property. It was partially these renovation projects, along with undocumented structural changes and construction error that may have led to the eventual collapse.

Constructed in 1981, the Champlain Towers South were one of a "family" of buildings built in the area using flat plate, mildly reinforced construction. The building was renovated in 1996, and structurally recertified in 2018 subject to a local building ordinance. The original construction was governed by ACI 318-77 and the South Florida Building Code. The renovations and maintenance work had significantly affected the pool deck area of the building, with significant distress noted prior to the collapse. During the course of the investigation, undocumented concrete topping and increased clear cover were among the factors that lead to a potential punching shear failure that is hypothesized to initiate the global structural collapse. Corrosion and foundation problems were investigated, but ultimately determined not to play a role in the collapse.



Matthew Fadden, PhD, P.E., from WJE presents a summary of the investigation into the Champlain Towers South collapse in Surfside, Florida.

It was an informative meeting, and thank you to Dr. Fadden for the presentation!

Task Group Formed to Develop Statewide Code Change Proposal

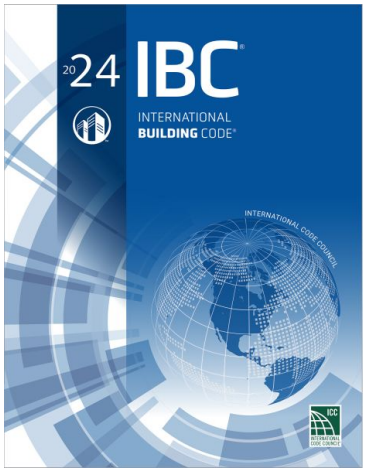
By Scott Neuman, Chair

The SEAW Earthquake Engineering Committee (EEC) has formed a task group that has started the long process of proposing state building code amendments to address several changes that are introduced in ACI 318-19, and are changed again in ACI 318-25. The intent of the code change proposal is to bring forward provisions from ACI 318-25 into an earlier building code to avoid drastic changes to design practices that would only be in effect until ACI 318-25 is adopted. Changes that are planned to be

addressed include seismic shear forces and capacities in special reinforced concrete shear walls, and one-way shear capacities in basement walls and footings.

The EEC is hopeful that the proposed state building code amendments will be adopted by the time of statewide 2024 IBC adoption at the latest, which is currently expected in late 2026. This is three years earlier than ACI 318-25 would normally be adopted as a reference standard through the code process. Ahead of this time, the EEC recommends reaching out to the respective Authority Having Jurisdiction (AHJ) for individual projects to discuss potential pathways to early acceptance of the ACI 318-25 provisions related to concrete shear walls and one-way shear.

The SEAW EEC meets virtually on the 4th Tuesday of every other month, with the next meeting scheduled for March 26th. Contact Scott Neuman at scott.neuman@kpff.com if you are interested in receiving a Teams link to the next meeting.



The statewide 2024 IBC adoption is expected by late 2026.

SWR Recommendations Expected to be Adopted in 2025

By Scott Douglas, Chair

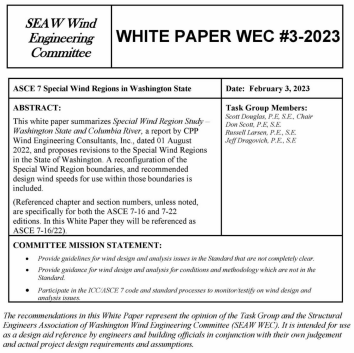
The Wind Engineering Committee submits the following report for the March 2024 Equilibrium:

- State of Washington Special Wind Regions (SWR) – The recommendations in White Paper WEC #3-2023 Structural Engineers Association of Washington have been submitted to the Washington State Building Code Council for adoption as an amendment to the Washington State Building Code. It is expected these recommendations will be adopted as an amendment and become effective in the first part of 2025. These recommendations for Washington State are also being submitted to the ASCE 7-28 Subcommittee on Wind Loads for balloting. SWR recommendations for Oregon and California will be submitted as separate ASCE 7-28 ballots by their respective State SEA Wind Engineering Committees.

- Update to the 2004 SEAW commentary on wind code provisions (ATC 60) – Work continues on this effort by the NCSEA CAC Wind Engineering Subcommittee. There is a December 31, 2024, deadline for submittal to the NCSEA Publication Committee. Several SEAW WEC Members are involved in this Commentary revision.

- City of Bellevue Kzt Map – Work continues on the Kzt Wind Load Factor map for the City of Bellevue's consideration. It will replicate the existing City of Seattle Wind Load Factor Map found at Wind Load Factors - SDCI. If adopted, the map will facilitate an alternate conservative method for rapid determination of Kzt factors and shoreline exposure in the City of Bellevue.

- Participation – All SEAW members, whatever their experience, are encouraged to participate in WEC meetings. Please contact the WEC chair, Scott Douglas sdouglasscott@gmail.com, to join the SEAW WEC and receive additional information and announcements on Committee activities and actions.



SEAW Wind Engineering Committee | **WHITE PAPER WEC #3-2023**

ASCE 7 Special Wind Regions in Washington State | **Date: February 3, 2023**

ABSTRACT:

This white paper summarizes *Special Wind Region Study – Washington State and Columbia River*, a report by CPP Wind Engineering Consultants, Inc., dated 01 August 2022, and proposes revisions to the Special Wind Regions in the State of Washington. A reconfiguration of the Special Wind Region boundaries, and recommended design wind speeds for use within those boundaries is included.

(Referenced chapter and section numbers, unless noted, are specifically for both the ASCE 7-16 and 7-22 editions. In this White Paper they will be referenced as ASCE 7-16/22).

Task Group Members:
Scott Douglas, P.E, S.E., Chair
Don Scott, P.E, S.E.
Russell Larsen, P.E., S.E.
Jeff Dragovich, P.E., S.E

COMMITTEE MISSION STATEMENT:

- *Provide guidelines for wind design and analysis issues in the Standard that are not completely clear.*
- *Provide guidance for wind design and analysis for conditions and methodology which are not in the Standard.*
- *Participate in the ICC/ASCE 7 code and standard processes to monitor/testify on wind design and analysis issues.*

The recommendations in this White Paper represent the opinion of the Task Group and the Structural Engineers Association of Washington Wind Engineering Committee (SEAW WEC). It is intended for use as a design aid reference by engineers and building officials in conjunction with their own judgement and actual project design requirements and assumptions.

It is expected the recommendations from the WEC Special Wind Regions White Paper will be adopted as a Washington State Building Code amendment and become effective in the first part of 2025.

Next Meeting – Friday April 26 from 11:00 am to 12:00 noon.

Meeting will be virtual via the following Zoom link:
https://us02web.zoom.us/j/87508890558?pwd=QTY5Q0RDak5PRmpGSzY4MndSWmswUT09
Passcode: 223141

REMINDER: Register for WAsafe Building Safety Evaluation (ATC 20/45 Plus) Classes

By Joyce Lem, Chair

The WAsafe Coalition was formed to be able to respond following a major earthquake or other natural disaster. WAsafe is the Washington state program that organizes and trains a cadre of engineers, architects, and other industry professionals so they can assist local jurisdictions in determining whether buildings are safe to occupy following a major disaster.

You can learn how to do post-disaster building safety evaluations (BSEs), join the WAsafe registry to help building officials with assessments, and help your community. Several WAsafe BSE classes (ATC 20/45) are offered in March:

In-person, full-day WAsafe BSE classes:

- March 15: Kennewick, WA. Register here for this class, taught by Jon Siu and Paul Brallier, sponsored by SEAW. Eligible for 7.5 PDHs.
- March 28: Lynnwood, WA. See the general information webpage WABO-AEI for the Annual Education Institute (AEI) of the Washington Association of Building Officials. Use the "Schedule" link on the webpage and navigate to March 28.

Online WAsafe BSE class, split into two half-days:

- March 5 & 6. The Seattle Chapter of the American Institute of Architects is planning to hold a WAsafe training. For details, go to AIA-Seattle

If you're already a member of WAsafe, your enrollment expires 5 years after your last training. See your ID badge for the expiration date. Please take the online Refresher training within 12 months after your WAsafe enrollment expires. For more details and to register, use this link: Refresher.

For more about the WAsafe program, visit the website: wasafecoalition.org.
SEAW is a key member of the WAsafe Coalition. If you have any questions about the Disaster Prep/Response Committee or the WAsafe program, please send an email to joyce.seaw@wasafecoalition.org



This one-story elementary school in Jojutla, Morelos, was heavily damaged by the 2017 Central Mexico Earthquake. In the event of a Washington state earthquake, WAsafe Building Safety Evaluators are needed to determine the safety of affected buildings. (Photo courtesy Reid Middleton).

SEFW Funds K-12 Popsicle Stick Bridge Competitions

By Angela Gottula Twining

Once again, the Structural Engineers Foundation of Washington has committed to funding two popsicle stick bridge building competitions to introduce students all over Washington to structural engineering principles.

SEFW contributed to the Mead School District's competition, which took place in February, and funded gift card prizes for the top three bridges in the elementary, middle, and high school categories. A

total of 75 bridges were tested, with 124 students participating and 12 schools in the Spokane-area district represented. More than 300 spectators attended the event to support the students.

The winning bridge assembled by an elementary school team held 374 pounds before breaking. The middle school champion bridge held 561 pounds, and the high school winner and overall competition star held a whopping 845 pounds! Congrats to all the students for their hard work and focus on structural engineering!

SEFW also funded the student prizes for the ASCE Popsicle Stick Bridge Competition which serves the students of the greater Puget Sound area. This year's event will take place on March 16 at the Museum of Flight in Seattle. All SEAW members are invited to attend and check out the work of many budding structural engineers!

Additionally, there is a corporate competition for professionals to see who can build the strongest bridge. In past years there have not been many entries so SEAW members are encouraged to design and bridge and enter! Details are available at the ASCE PSB website.



Nolan Carr (left) and Zane Twiggs, students at Mead High School in Spokane, placed first in the district's popsicle stick bridge competition in February, with a bridge that held 845 lbs.

SEAW Seattle Chapter Nominating Committee Notice

Committee Members:

- Darrell Staaleson, Seattle Chapter Past-President (chair)
- Chun Lau, Seattle Chapter Past-President
- Tyler Winkley, Seattle Chapter Past-President
- Mike Visser, Seattle Chapter Past-President
- Peter W. Somers, Seattle Chapter Past-President
- Shalini Prochazka, Seattle Chapter Past-President
- Jessica Jenness, Seattle Chapter President (ex officio)

In accordance with SEAW Seattle Chapter Bylaws, NOMINATING COMMITEE SELECTION PROCEDURES & Names of Members Eligible for Candidacy, "*The Nominating Committee shall report their nominations for office: one (1) name for President, at least one (1) name for Vice President, and at least one (1) name for each Director to be elected."*

The Nominating Committee works to select candidates for officers from among those who have actively served on the Board of Director and who have a good working knowledge of our association and have demonstrated leadership skills or potential. The Nominating Committee works to select members for the Board of Directors from a diverse cross section of our industry. We look closely at leaders coming from YMG. Additionally, the work of the Nominating Committee is done throughout the year by encouraging members to become involved and, as TR (Teddy Roosevelt) said, you lead and inspire "not by pointing the way. You lead by Riding the Horse!" The goal is to have the names of nominees before the committee meets.

NOTICE OF NOMINATIONS:
In accordance with our Bylaws, the Seattle Chapter Nominating Committee was formed by the Seattle Chapter President, Jessica Jenness. The Nominating Committee met on February 2, 2024, and discussed candidates for officers and for the Board of Directors and nominates the following members for election:

- For President: Owen Kohashi
- For Vice President: Patrick Lindblom
- For Board of Directors position #1: Kyle Johnson
- For Board of Directors position #2: Lisette Terry

Please see the accompanying headshots & biographies.

NOTICE FOR ADDITIONAL NOMINATIONS:
The Members of SEAW Seattle Chapter are given notice that the Nominating Committee will accept additional nomination from the membership upon a petition of at least five member SEs received within ten days of this Notice.

Call for Elections
Ten days following the publication of candidates from the Nominating Committee in Equilibrium (or special announcement via email), the Nominating Committee will send the names of their Nominees and any Nominees submitted by the membership to the Elections Committee. Elections are called and

directed by the Elections Committee which consists of three member SEs appointed by the President. This Committee shall warrant to the membership the proper conduct of the nomination and the elections in accordance with these bylaws. Elections shall begin not earlier than ten days after Notice of Nominations in Equilibrium.



Owen Kohashi, P.E., S.E., is the Interim Civil and Mechanical Engineering Manager overseeing the structural, civil, and mechanical engineers and drafters at Seattle City Light. He moved to Seattle to attend the University of Washington and worked at Magnusson Klemencic Associates for 18 years prior to working at City Light for the last 13 years. Owen joined SEAW in 1992 and was a founding member of the Sustainability committee. Owen is licensed in Washington, and is also a LEED Accredited Professional, a PMI Project Management Professional, and an AWS Certified Weld Inspector. He has a wide range of experience with different materials such as concrete, PT, wood, and masonry, and has a special expertise in steel design. He has experience designing many different building types including cultural and performing arts buildings, higher education buildings, libraries, convention centers, office buildings, parking garages, retail, hospitals, stadiums, and hangars. In addition to building design, his work at City Light has allowed him to experience engineering of less common structures, such as hydroelectric dams, powerhouses, substations, transmission towers, and underground structures.



Patrick Lindblom, P.E., S.E., is an Associate Principal in DCI Engineers' Seattle office. He has more than 15 years of engineering experience in office, multi-use, hospitality, multi-family and retail buildings. His focus is on commercial development and he has successfully managed high-rise and Performance Based Seismic Design projects in California and Washington. Patrick has been a member of SEAW for more than 11 years and has been active in the Earthquake Engineering Committee (EEC) for nine years. He is SEAW's liaison with the Building Seismic Safety Council (BSSC), and is a member of ACI, EERI, CTBUH, and NAIOP.



Kyle Johnson, P.E., S.E., is a senior structural engineer at Coffman Engineers in the Seattle office. He has chaired the SEAW Outreach Committee for the last 3 years and is currently serving on the NCSEA Seismic Committee. Outside of the SEA organizations, Kyle is involved in the AIA Mass Timber Committee, NAIOP Programs Committee, and Washington State Society of Healthcare Engineers (WSSHE). As a Seattle native, Kyle strives to promote and grow the structural engineering industry in the local community. Inspiring the next generation of structural engineers, Kyle has served as a structural engineering mentor for the local ACE Mentor Program since 2016.



Lisette Terry, P.E. is a project manager at YA Engineering Services. In her career, she has worked on structural engineering for buildings and marine projects (like a fish passage release site on the White River in Washington or water saving basin structures on the Panama Canal), and now focuses on forensic engineering. Lisette investigates the causes of damage to homes and businesses and determines repairs, managing quick-paced damage reconstruction and damage investigation projects. She is also passionate about advancing diversity, equity, and inclusion efforts in the industry and founded the SEAW Diversity and Inclusion committee in 2020, of which she still serves as Chair.

Interested in Joining SBCC's Technical Advisory Group?

The State Building Code Council (Council) is seeking members for the Technical Advisory Groups (TAGs) in preparation for the 2024 code adoption cycle. Technical Advisory Groups review new editions of the

model codes to identify significant changes and review existing and proposed state amendments.

The Council is recruiting for positions on TAGs for the 2024 code adoption cycle. In the 2024 cycle, the state building codes are divided into two groups. Group 1 is the International Building Code; the International Existing Building Code, the International Fire Code, the International Mechanical Code, and the Washington State Energy Code (Commercial). The 2024 TAGs will convene in March to begin review of the Group 1 codes. The review process will conclude with a report to the standing committees. The TAGs set a meeting schedule once convened.

The Council welcomes all applicants for positions on any of the TAGs. Please see the website for the application form and process: Applicants will be asked to confirm the support of a local or statewide organization, where possible. All positions are open and previous TAG members must reapply. The deadline for applicants is March 8, 2024.

The state building code adoption process depends on involvement of the experts and professionals in the building industry. Please consider participating and respond to the Council at sbcc@ga.wa.gov. If you have any questions, please contact staff at the email address above.

Calendar

March 19, 2024, 4:00 - 5:15 PM
Seattle Chapter Meeting "Mass Timber Taking Root" *(Zoom Webinar)*

April 18, 2024
SEAW Southwest combined meeting with AIA SWW and CSI, *(TBA)*

April 26, 2024, 11:00 AM - 12:00 PM
WEC Meeting *(Zoom Webinar)*

June 5, 2024, 6:05 PM
SEAW Southwest Chapter Social, *(@Rainiers Baseball Game)*

September 3-6, 2024
SEA Northwest Conference *(@Hyatt Regency Portland at the Oregon Convention Center)*

November 5-8, 2024
NCSEA Summit *(@MGM Grand, Las Vegas, NV)*

Welcome New SEAW Members!



John Frisby
Washington State Ferries
PE Member - Seattle Chapter

Lily Swanson
University of Washington
Student - Seattle Chapter

Glenn Madden
Avista
PE Member - Spokane Chapter

Employment Opportunities

Are you currently seeking employment as a structural engineer, senior manager, or a senior engineer technician? Check out our job board for **current employment opportunities**.

Opportunities for Mid-level Structural Engineer and Senior Project Manager:

Seattle Structural is a downtown Seattle firm looking for qualified structural engineering professionals to join our talented team practicing across several different industries. Seattle Structural offers an excellent opportunity to work on a variety of public and private institutional, healthcare, educational, and commercial projects. Specialty areas include waterfront, scoreboards and large display systems, and construction support. We offer a competitive salary and a relaxed, collaborative work environment. Work is on-site in our Belltown office near the waterfront. Benefits include medical, transit reimbursement, and retirement matching. Seattle Structural is a firm that makes it easy to become personally invested in the achievements of your company.

Telecommuting or working from home is not compatible with our workflow and we will not consider your application if you are unable to be physically present in our office during regular business hours. This is a full-time on-premise employee offer only. Contract engineers and remote work will not be considered. Seattle Structural is an Equal Opportunity Employer.

We are filling two positions. Candidates must meet the following requirements:

- Mid-level Engineer: 5+ years' experience.
- Senior Project Manager: 10+ years' experience.
- BS or MS in Structural, Civil/Structural, or Architectural Engineering.
- Experience in steel and concrete buildings, aluminum structures, lateral analysis, deep foundations, and marine projects are desired.
- Working knowledge of CAD and Revit preferred.
- Strong emphasis on client service.
- Excellent communication skills.
- Strong technical skills.

To apply, please email a cover letter along with your resume which includes your professional references.

Please address inquiries to:
Lisa Wipplinger
Seattle Structural PS Inc.
3131 Elliott Avenue Suite 600A
Seattle, WA 98121
LWipplinger@SeattleStructural.com

Structural Engineer – Senior Project Manager Kirkland, WA

Structural Project Managers at Dibble Engineers, Inc. (DEI) are provided opportunities to enhance their management and leadership skills by training and mentoring junior staff. PMs are challenged to strive for their SE licensure, Team Lead and Associate-level positions, and are encouraged to assist in business development, client retention, and company growth initiatives.

Description and Details:
If you are a creative, proactive, and detail-oriented leader with the desire to manage your own projects from beginning to end, further advance client retention and referral strategies, and help grow our business, you could be a great fit for our learning culture. Our team works collaboratively to enhance the structural design and construction process; however, if you also enjoy mentoring and educating junior staff to build confidence in independent research of complicated engineering issues, we will provide you the chance to grow your leadership and people management skills. If you enjoy a good laugh and a fun working environment yet possess excellent technical skills and uncompromising work ethic and quality standards, we will highly value your contributions to our growing team.

Interested in joining us? Send your resume with cover letter to info@dibbleengineers.com

Apply Now!

Senior Structural Plan Engineer
Company: City of Seattle Department of Construction and Inspections (SDCI)
Location: Seattle, WA

The Seattle Department of Construction and Inspections (SDCI) Engineering Services Division is hiring a Senior Structural Plans Engineer (Sr. SPE) to serve as part of our dynamic Unreinforced Masonry (URM) Program Subject Matter Expert (SME) team. This URM-focused Sr. SPE will serve as the primary technical resource, working with the URM Program Manager, for the development and implementation of

a mandatory URM retrofit program. This program is currently in development and the successful candidate will play a primary role in the shaping of permit, plan review, and compliance processes. The anticipated impact of this program will be a milestone in Seattle's pathway to earthquake resilience, culminating in a mandatory URM retrofit program, the first of such program outside of California.

This Sr. SPE position is part of SDCI's Ordinance and Structural (O/S) review team. The successful candidate will also be participating and fulfilling the job responsibilities of a Senior Structural Plans Engineer including plan review and other related tasks. Please visit http://www.seattle.gov/jobs for more information and to apply. The position will remain open until filled.

Apply Now!

Applying or Renewing your Membership in SEAW

SEAW is organized into the membership categories and their corresponding dues structures listed below. Select the membership category that best fits your status.

Your contact information is shared with our foundation, SEFW.
In order to "opt-out" please **contact** the association office. **Click here** for our privacy policy.

Join or Renew Today

Please consider making a line-item donation to **SEFW** as part of your dues renewal. Special designation can be placed on the donation, so it can be applied to scholarships, disaster preparedness or research opportunities. SEFW fulfills its mission with the assistance of donations from individuals and corporations. More information on SEFW and its mission to promote structural engineering can be found at **www.sefw.org**. Thank you for your support!

Structural Engineers Association of Washington

info@seaw.org | **206.338.7376** | www.seaw.org

SEAW | 5727 Baker Way NW, Suite 200, Gig Harbor, WA 98332

Unsubscribe seaw@aminc.org

Update Profile |Constant Contact Data Notice

Sent bygrace@seaw.ccsend.compowered by

Constant Contact

Try email marketing for free today!