



Fall Quarterly Business Meeting
October 27-28, 2022
Historic Davenport, Spokane, Washington

Agenda

Thursday, October 27

- 7:30 a.m. Registration & Coffee Service – *Early Bird Ballroom*
First Timer's Orientation – *John Reed Boardroom*
- 8:00 a.m. Business Meeting – *Early Bird Ballroom*
 Call to Order
 Pledge of Allegiance to the Flag
 Introductions
 Recognitions, Relocations, Memorials
 Agenda Approval: October 27-28, 2022 – Fall Business Meeting
 Minutes Approval: July 28-29, 2022 - Annual Business Meeting
 President Report
 Executive Board Report
 Officers' Reports
 Election of Board of Directors Nominations – April ABM
 Executive Director Report
- 9:00 a.m. Recess to Committee Meetings:
- Technical Code Development Committee – *Early Bird Ballroom*
- Group 2 State Proposals
 - Voting Guide
 - 2027 ICC Updated Code Development Process
- Education / Outreach Committees – *John Reed Ballroom*
- 2023 Annual Education Institute
 - Outreach Efforts
- 10:30 a.m. Government Relations Committee – *Early Bird Ballroom*
- Lobbyist Report
 - Legislative Strategies for Upcoming Session
 - Finalize 2023 Legislative Positions
 - Volunteers for Legislative Subcommittee

- 10:30 a.m. Emergency Management Committee – *John Reed Boardroom*
- EMD Update
 - WAsafe Update
- 12:00 p.m. Luncheon – *Isabella Ballroom*
- 1:00 p.m. Guest Reports – *Early Bird Ballroom*
- International Code Council
 - ICC Region II
 - ICC Local Chapters
 - IABO
 - WPLBO
 - OBOA
 - NFPA
 - WABO / SEAW
 - State Agencies
 - State Building Code Council
 - MyBuildingPermit.com
 - Liaison Reports
 - Other
- 2:30 p.m. Strategic Planning Kickoff
- 3:00 p.m. Energy Code Task Force – Energy Code Plans Examiner Certification Program
- 4:00 p.m. Code Forum
- Please put forum topics for discussion on White Board
- 5:00 p.m. Recess until Friday morning
- 6:00 p.m. WABO Social Event – *24 Taps*

Friday, October 28

- 7:30 a.m. Coffee Service – *Early Bird Ballroom*
- 8:00 a.m. Business Meeting Reconvenes
- Motions and Action Items
- Reports - Standing Committees:
- Certification & Registration
 - Technical Code Development
 - Government Relations
 - Finance
 - Education
 - Outreach Services
 - Emergency Management
 - Accreditation
- Unfinished Business
- New Business
- Announcements

9:00 a.m. Professional Development – “Who Says Who Stamps?” Architectural, Engineers,
Landscape Architects Licensing Board Panel (ICC PP #33861)

12:00 p.m. Adjourn

Mark Your Calendar!

**February 02, 2023 - Winter Committee Meeting
Zoom Conferencing**

**March 20-24, 2023 – WABO Annual Education Institute
Lynnwood Convention Center**

*****April 20-21, 2023 - Annual Business Meeting***
Leavenworth, WA**



WASHINGTON ASSOCIATION OF BUILDING OFFICIALS

"Leading the way to excellence in building and life safety"

Proposed MINUTES – 2022 Annual Business Meeting

Bremerton, Washington

July 28-29, 2022

Call to Order

The annual business meeting of the voting representatives was called to order by President Kurt Aldworth on July 28, 2022 at 8:05 a.m.

Roll Call

The following executive board officers were present:

Kurt Aldworth	-	President
Andy Higgins	-	1st Vice President
Ray Cockerham	-	2 nd Vice President
C. Ray Allshouse	-	Immediate Past President

The following executive board directors were present:

Brian Smith	-	Certification & Registration
Micah Chappell	-	Technical Code Development
Tim Woodard	-	Government Relations
Angela Haupt	-	Finance
Stacy Criswell	-	Outreach Services
James Tumelson	-	Accreditation
Trace Justice	-	Past President
Gary Schenk	-	Past President

The following executive board directors were absent:

Todd Blevins	-	Education
Doug Powell	-	Emergency Management

The following management personnel were present:

Tara Jenkins	-	Executive Director
Troy Jenkins	-	Jenkins Management Solutions
Tanner Jenkins	-	Jenkins Management Solutions

Introductions

The active member voting representatives, associate members, and guests introduced themselves. Registration list on file at WABO office.

Agenda

The President presented the proposed Agenda for the July 28-29, 2022, Annual Business Meeting.

MOTION: It was moved and seconded that the agenda as presented be approved.
The motion carried.

Minutes

The President presented the proposed Minutes for the WABO Spring Quarterly Business Meeting on April 21-22, 2022.

MOTION: It was moved and seconded that the Minutes be approved as presented.
The motion carried.

President's Report

President Kurt Aldworth reported that the Executive Board is working on identifying the top 10 entities that will be prioritized on the WABO liaison list. Kurt reported on the 3rd Party Energy Code Plans Examiner Program and announced it will be discussed in further detail in the C & R committee meeting. Kurt provided an update that the SBCC will not be developing the 2021 WA custom codes and stated that Mark Johnson from ICC will be in attendance to discuss options. Kurt announced the WABO toll free number has been dissolved. Kurt reported Tom Phillips has resigned from the Executive Board and Gary Schenk will not remain on the board for the 22/23 year and will remain as a technical consultant and liaison for WPLBO. Kurt closed his last report and stated it was an honor and a privilege to serve.

First Vice President

Andy Higgins reported on the OBOA relationship building that has occurred and provided an overview of how they run their meetings. Andy announced the Officers are currently trying to establish an MOU for Officer attendance between meetings between the organizations.

Second Vice President

Ray Cockerham announced that the Emergency Chair position was vacant and if you were interested in that position to please see him. Ray reported the current Officers will be meeting to discuss the Strategic Plan and focus on financial solvency and will report back to the group to seek membership input.

Bylaw Committee

No Report.

Nominating Committee

Ray Allshouse announced one of the duties of the Immediate Past President is to serve as the Nominating Chair. WABO typically will ask a board member to serve in their position for a 2 year commitment. The WABO Board of Director elections will be held in the afternoon, and we have a full slate of candidates running for each position. Ray reminded members that voting representatives can run for any position, with the exception of the Past Presidents. Anyone interested in running for office should fill out a nomination form.

The current candidates for the WABO Officers are as follows:

Andy Higgins	-	President
Ray Cockerham	-	1st Vice President
Todd Blevins	-	2 nd Vice President

The current candidates for the WABO Committee Chairs are as follows:

Brian Smith	-	Certification & Registration
Micah Chappell	-	Technical Code Development
Tim Woodard	-	Government Relations
Angela Haupt	-	Finance
Max Booth	-	Education
Stacy Criswell	-	Outreach Services
Ryan Mumma	-	Emergency Management
James Tumelson	-	Accreditation

Executive Director

Tara Jenkins announced the meeting logistics to the membership. Members were informed that the budget approval would occur on Thursday. Tara highlighted the WAsafe and Code Official Accreditation Program.

Meeting recessed for committee meetings at 8:45 a.m.

Meeting reconvened at 1:20 p.m.

Election of WABO Board of Directors

Ray Allshouse asked if there were any other nominations for the Board of Directors.

He called for unanimous consent for the entire slate of Officers and Committee Chairs.

MOTION: It was moved and seconded that the officers and committee chairs be approved.

The motion carried.

GUEST REPORTS:

International Code Council

Kraig Stevenson announced early registration for the ICC Annual Business Meeting is August 1, 2022. Kraig reminded members to report new hires to establish governmental voting right by August 15, 2022. Kraig announced a partnership ICC has with NFPA for solar energy. Kraig provided an overview of the Digital Codes Complete and stated Phil Anthony can do a presentation for WABO. Kraig discussed the IWUIC mapping issues. Kraig stated has a codification branch and produce quality code publishing.

ICC Region II

Ted Zuk informed the members of the current Region II Officers and areas that make up Region II. Region II meets every 2nd Wednesday by Zoom and typically there are ICC Board members present. Ted announced the bylaws have been updated to have the board members serve a 2-year term instead of a 1-year term. Ted highlighted items for sale that will benefit the Safety 2.R and Military Program.

ICC Local Chapters

OBOA

Ted Zuk reported that Amy Williams (OBOA Past President) was unable to attend and he wants to make sure to keep the rest alive. Ted reported that OR and WA have similarities with the EV charging stations and IWUIC and wanted to report on new legislation on magic mushroom facilities that we could see heading into WA.

NFPA

Gary Honold announced NFPA has electrical certifications available and can be reviewed on the website. Gary announced the 2023 NEC would be released in September or October. Gary provided an overview of training classes that he can provide, and if interested to please contact him. NFPA has a newsletter that is customizable to your interest. Gary encouraged members to sit on a technical committee (standards development process), their enforcer program will pay for 80% of the cost to attend. Gary highlighted NFPA's subscription service which can be a single user, team, or enterprise version. Gary reported NFPA has podcasts that are available.

IABO

Nothing to report.

WPLBO

Trace Justice reported the Western Pacific League of Building Officials (WPLBO) just met in Costa Mesa CA on July 14-15, 2022 for the annual candidates forum. WPLBO is made up of WA, CA, Southern NV, & OR. CALBO hosted, Southern NV was unable to attend, and Region I & Region II were also in attendance. Trace reported CA and WA were in agreement on who we were going to endorse: Michael Wich, Stuart Tom, David Spencer, Ron Hampton, Angie Wiese, Jose Roig, and Jack Applegate

WABO/SEAW

Micah Chappell provided an update on behalf of Kai Ki Mow regarding code change proposals that are coming in with significant work with tsunami mapping. Micah stated that this will be adopted as an off-cycle rule and will impact the Puget Sound area with Risk Category 4 Structures.

State Agencies

No reports.

State Building Code Council

Micah Chappell announced Group 2 is in the middle of the process, CR102 moved recommendations forward which sends it to the code revisers office. Micah stated the 1st meeting for public comments will be September 23, 2022 and you can attend in person or submit your comments in writing. Micah stated the Technical Advisory Groups (TAG's) are just an advisory body. Micah reported the SBCC is having staffing issues, struggling to hire for open positions.

MyBuildingPermit.com (MBP)

Kurt Aldworth report that MyBuildingPermit.com (MBP) is a one-stop shop portal for applying for permits online. Kurt announced several jurisdictions are part of MBP and encouraged jurisdictions to research the platform and get involved. In the month of May, newer platform standards were added, user help prompts were improved, and a link to Labor & Industries for contractor verification. Kurt reported King County Public Health is looking into MBP. MBP fees are structured based on population and migration fees.

NW Housing Association

Lance Clark reported that John McMillian (FAS Technical Specialist) from L & I has retired and Charlie Parton in the Yakima office is the new contact pacx235@lni.wa.gov. Lance reported resources can be found on their website and encouraged members to visit www.todaysmanufacturedhome.com.

Liaison Reports

WA Cities Electrical –

Kurt Aldworth reported the last meeting held on July 18, 2022 has scheduled a 'Hazardous Locations' training session for electrical inspectors October 5-6, 2022 that will be presented by Chris Jensen from UL. MyBuildingPermit.com will have the registration information for the training on their website. Kurt reported Tim Hingtgen who chairs the committee is retiring from the City of Bellevue and is stepping down and that Gary Bartelheimer from the City of Kirkland has accepted the committee chair position and is transitioning into the role. Kurt reported IAEI will be in Spokane September 11-15, 2022 and that Chris Jensen will be providing a lot of training at this meeting, James Tumelson reminded members this coincides with ICC's Annual Business Meeting.

Energy Code Task Force

Stacy Criswell and Brian Smith led the discussion on the Commercial Energy Code Plans Examiner Proposals that were included in the meeting packet. Several questions were raised that the subcommittee will have to work out and clarify with Lisa Rosenow with Evergreen Technology Consulting.

Finance Report

Angela Haupt provided the membership with an overview of WABO's 2021/2022 year end financials.

Motion and Action Items

Finance Report

Angela Haupt presented the 2022/2023 WABO Budget.

Motion: It was moved and seconded to approve the 2022/2023 Budget as presented. Motion passed.

Meeting recessed for code forum at 4:15 p.m.

Friday, July 29, 2022 at 8:05 a.m. – Meeting reconvened

President Andy Higgins reconvened meeting at 8:05 a.m.

STANDING COMMITTEE REPORTS:

Motion and Action Items

None.

Technical Code Development Committee

No Report.

C & R Committee

Brian Smith reported the committee will be meeting virtually going forward as to not compete with other committees meeting at the Quarterly business meetings. If you are interested in being on the C & R committee invites, please e-mail Brian Smith or Tara Jenkins to be added to the distribution list.

Government Relations Committee

Tim Woodard informed members that they were working on the 2023 Legislative Priorities list and should have that codified at the next meeting. If you have any changes to the list, please e-mail him. Tim reported that Marian Dacca stated that if the elections resulted in shifting of seats that it would create a more even balance in the legislature.

Education Committee

No report.

Outreach Services Committee

Stacy Criswell spoke to the first-time attendees and stated this was a real opportunity to connect. He encouraged the first timers to look at the attendee list and reach out as there is a lot of wisdom in the room. Stacy encouraged the members to meet with their neighboring jurisdictions and have discussions with them, invite them to our meetings, and offer them the meeting scholarship to attend.

Emergency Management Committee

No report.

Accreditation Committee

James Tumelson announced that the Electrical Inspectors are down 28 inspectors and that their lobbyist is working on possible legislative solutions.

James reported the committee has hired an additional teacher for the first year and all 3 years will be running concurrently. James announced the 4th year Building Official track has completed the DACUM (developing a curriculum) process with stakeholders and code officials and is moving forward with the course objectives. James reported the committee has been working on developing a charter as a tool for committee chairs and strategic planning. James encouraged members to get involved in the committee which meets remotely, and if interested to please e-mail James Tumelson or Tara Jenkins.

Announcements

Jack Applegate announced a [Code Official Safety Specialist Course](#) which consists of five 170-minute sessions focused on little things you can do to protect yourself. The training is an ICC partner and counts toward CEU's.

Micah Chappell asked for the status of the liaison priority list. Kurt Aldworth and Andy Higgins are in the final stages of identifying the top 10 and will setup a meeting to solidify the list.

Unfinished Business

None.

New Business

WA Custom Codes - Micah Chappell reported in 2018 the State Building Code Council (SBCC) had worked with ICC and WABO to produce the 2018 WA Custom Codes and the SBCC also produced the amendments (insert pages). Due to staffing issues the SBCC will not be able to move forward with creating amendments (insert pages) or assist with the 2021 WA Custom Codes. Mark Johnson informed the membership that ICC and WA state have come a long way since the 2015 WA State Building Code and then the full line up of 2018 WA Custom Codes, and would hate to see us not move forward with the 2021 WA Custom Codes. Mark stated that ICC has codification services and that they also need a state code to help jurisdictions who want to insert their local amendments. Mark Johnson also warned members

that they have been experiencing supply chain issues and wanted to inform members that it could be an issue. Another issue that was raised was the code implementation date of July 1, 2023 and if we can make that deadline for a release date.

A subcommittee has been created to create the 2021 WA Custom codes and Micah Chappell will be the chair. The current subcommittee members are:

David Lynam (WSFM will help with IFC & IWUIC), David Swasey, City of Spokane, Nate Tilson, Brian Smith, Kurt Aldworth, Katie Conrad, Marty Gillis, Ray Cockerham, Clark County.

WABO will send a call for volunteers to add to subcommittee members to assist with the 2021 WA Custom Codes.

MOTION: It was moved and seconded that WABO will support moving the code implementation date to November 1, 2023 and present the request to the SBCC.
The motion carried.

Meeting adjourned at 9:15 a.m.

**WABO Fall Business Meeting
October 27- 28, 2022
Attendee List**

KURT ALDWORTH CBO, ACO
CITY OF KIRKLAND

SEAN ANGELEY
CITY OF BELLINGHAM

SCOTT AUSTIN
TOWN OF COUPEVILLE

JERRY BESSETT
GRANT COUNTY

MAX BOOTH
CLARK COUNTY

MICAH CHAPPELL MBA, CBO
CITY OF SEATTLE, DCI

RAY COCKERHAM CBO
CITY OF PUYALLUP

MARIAN DACCA
WASHINGTON ASSN OF BUILDING OFFICIALS

STEPHANIE DAY
CITY OF KIRKLAND

ALEXANDER EDISON
CITY OF WEST RICHLAND

VICTORIA FORTE
CITY OF MONROE

MARTY GILLIS CBO
WEST COAST CODE CONSULTANTS, INC.

ANGELA HAUPT CBO
CITY OF KIRKLAND

DANA HERRON CBO
CITY OF MILTON

WILLIAM HILL CBO, ACO
BHC CONSULTANTS

CHRISTOPHER HORTON
NORTHWEST CODE PROFESSIONALS

TANNER JENKINS
WASHINGTON ASSOCIATION OF BLDG. OFFICIALS

C. RAY ALLSHOUSE AIA, CBO, ACO
CITY OF SHORELINE

JACK APLEGATE
NORTHWEST CODE PROFESSIONALS

PATRICK BARRY
CITY OF TACOMA

R. TODD BLEVINS CBO
CITY OF WEST RICHLAND

LOWELL BROWN
4LEAF, INC.

TONY CLIFTON CBO
CITY OF BLACK DIAMOND

STACY CRISWELL CBO, ACO
CITY OF MONROE

SHANE DAUGHERTY AIA
BHC CONSULTANTS

ROBERT DOBOVSKY
CITY OF MOSES LAKE

ALAN FINDLAY PE
CITY OF RENTON

STEVE GEORGE
CITY OF MOUNT VERNON

BRYAN HAMPSON
MAINSTREET PROPERTY GROUP

MAUREEN HENNING
GRANT COUNTY

C. ANDREW HIGGINS MCP, CBO, ACO
CITY OF SEATTLE, DCI

GARY HONOLD
NATIONAL FIRE PROTECTION ASSOCIATION

ARDEL JALA PE
CITY OF SEATTLE, DCI

TARA JENKINS
WASHINGTON ASSN OF BUILDING OFFICIALS

TROY JENKINS

JENKINS MANAGEMENT SOLUTIONS, LLC

HOYT JETER PE

CITY OF TACOMA

SHANNON KING

CITY OF PUYALLUP

JEREMY LARSON

KITITITAS COUNTY

TIM LINCOLN

CITY OF ORTING

HEATHER MAUSETH

DOUGLAS COUNTY

TERRY MOURNING

CITY OF CHENEY

JOSEPH NICOLAS PE

4LEAF, INC.

TONY OSTOJA

CITY OF KENNEWICK

GINGER PENNINGTON

CITY OF OAK HARBOR

LISA ROSENOW

EVERGREEN TECHNOLOGY CONSULTING (ETC)

JIM SAYERS

CITY OF OREGON CITY

BRIAN SMITH CBO, ACO

CITY OF CAMAS

ANDY STAMSHORR

CITY OF SUNNYSIDE

DAVID SWASEY CBO, ACO

CITY OF BOTHELL

MICHAEL TROIDL

FRANKLIN COUNTY

BENJAMIN VANDUINE

CITY OF BOTHELL

STEVEN WILSON

CITY OF KENT

MICHELLE YEE

SIMPSON STRONG-TIE COMPANY, INC

ERIK JENSEN

CITY OF OLYMPIA

TRACE JUSTICE CBO, ACO

SNOHOMISH COUNTY

CRYSTAL KOLKE CBO

CITY OF NEWCASTLE

JESSICA LETHER

CITY OF MONROE

LUKASZ LISOWSKI

CITY OF KENMORE

JEROMY MOORE

CITY OF PULLMAN

RYAN MUMMA CBO, ACO

CITY OF BELLEVUE

SHANE NILLES CBO

CITY OF CHENEY

MICHAEL PAPAHRONIS

PORT OF SEATTLE, AIRPORT BLDG DEPT

CINDY REDDEKOPP

CITY OF AIRWAY HEIGHTS

GINNY RUMISER

WHITMAN COUNTY

JON SIU PE, SE, ACO

JON SIU CONSULTING, LLC

ROBERT SNYDER

CITY OF BELLEVUE

CHRISTOPHER STOKES

NORTHWEST CODE PROFESSIONALS

QUYEN THAI CBO, MCP

CITY OF TACOMA

JAMES TUMELSON CBO, MCP, ACO

CITY OF EDGEWOOD

RICHARD WILLIAMS

CWA CONSULTANTS

TIM WOODARD

CITY OF BLAINE

CHRIS YOUNG

GRANT COUNTY



Relocations, Recognitions, & Memorials

Chuck Doan – City of Richland – New Building Official

Kenneth Marshall – City of Sultan – New Building Inspector

Roy Simmons – City of Ocean Shores – New Building Official

Heather Mauseth – Douglas County – New Building Official

Joseph Stapleton – City of Burien – New Building Official

Orlando Howell – City of Hoquiam – Retired

Jack Helm – City of Newcastle – Retired

**Please Let Us Know When You Learn of Code Official Relocations,
Recognitions, & Memorials**



To OUR



SPONSORS

PLATINUM

CWA Consultants, PS
Jon Siu Consulting, LLC



SPONSORS

Interior Technology

DIAMOND

Northwest Code Professionals



SPONSORS

BHC Consultants

GOLD

SAFEbuilt Washington, LLC



SPONSORS

4LEAF, Inc.

SILVER

AeroWelding, LLC
Clarity Consulting Engineers, PLLC



SPONSORS

Tyler Technologies

BRONZE

My Building Permit.com
West Coast Code Consultants, Inc.
Bower Associates
Simpson Strong-Tie
Western Wood Preservers Institute
Bitco Software
Aminian & Associates, PLLC



SPONSORS

APA The Engineered Wood Association
IAPMO
Selectron Technologies
Viega, LLC
National Fire Sprinkler Association
Hoover Treated Wood Products
Joto-Vent System USA



SCHEDULE OF EVENTS

Year 2022

October 27-28	Fall Business Meeting	Davenport Hotel, Spokane
---------------	-----------------------	--------------------------

Year 2023

February 02	Winter Committee Meeting	Zoom Conferencing
March 20-24	Annual Education Institute	Lynnwood Convention Center
April 20-21	Annual Business Meeting	Enzian Inn, Leavenworth
July 20-21	Summer Business Meeting	Convention Center, Ocean Shores
October 26-27	Fall Business Meeting	Marcus Whitman, Walla Walla

Year 2024

Jan/Feb TBD	Winter Committee Meeting	Zoom Conferencing
March 25-28	Annual Education Institute	Lynnwood Convention Center
April 18-19 (Held)	Annual Business Meeting	Enzian Inn, Leavenworth
July 18-19	Summer Business Meeting	TBD
October 17-18	Fall Business Meeting	Heathman Lodge, Vancouver



*Save
the
Date*

WINTER BUSINESS MEETING

Registration Fee: \$0

Location:

Zoom Conferencing

Date:

February 2, 2023

Thursday 9:00 AM - 12:00 PM

REGISTER ONLINE AT WWW.WABO.ORG

For More Information Call (360)628-8669



ACCREDITED CODE OFFICIAL

Join your colleagues and become a  Accredited Code Official.
Application forms available on our website at www.wabo.org

Congratulations to the following **A**ccredited **C**ode **O**fficials

Gary Schenk, CBO, ACO

C. Andrew Higgins, MCP, CBO, ACO

Willie Hill, CBO, ACO

Michael Barth, MCP, ACO

Trace Justice, CBO, ACO

Gregory Colvig, CBO, ACO

Mary Kate McGee, CBO, ACO

Dave Cantrell, ACO

Sean Carlstrom, MCP, CBO, CFM, ACO

Dermott Murphy, CBO, MCP, ACO

S. Kelly Mayo, CBO, ACO

C. Ray Allshouse, CBO, AIA, ACO

Tim Nordtvedt, CBO, ACO

Kurt Aldworth, CBO, ACO

David Spencer, CBO, ACO

Jon Siu, PE, SE, ACO

Sheila Salerno, CBO, CFCO, ACO

Lee Kranz, CBO, ACO

Thomas Phillips, CBO, ACO

Dean Giles, AIA, ACO

Gary Lampella, ACO

Stacy Criswell, CBO, ACO

Brian Smith, CBO, ACO

David Swasey, CBO, ACO

Ryan Mumma, CBO, ACO

James Tumelson, CBO, MCP, ME, ACO

LG Nelson, CBO, ACO

Andie Lorenz, ACO

WABO
Budget Comparison
07/01/2022 to 09/30/2022

		This Period	Budgeted	Percentage
Member Services				
	Income	\$ 9,175	\$ 77,520	11.8%
	Expense	\$ 90,251	\$ 264,790	34.1%
Bookstore				
	Income	\$ 14,209	\$ 361,785	3.9%
	Expense	\$ 13,159	\$ 337,923	3.9%
Welder Program				
	Income	\$ 109,666	\$ 547,345	20.0%
	Expense	\$ 52,359	\$ 229,098	22.9%
Special Inspection Program				
	Income	\$ 21,425	\$ 108,650	19.7%
	Expense	\$ 29,190	\$ 116,885	25.0%
Education Institute				
	Income	\$ -	\$ 159,500	0.0%
	Expense	\$ -	\$ 157,431	0.0%
Seminars				
	Income	\$ 5,100	\$ 15,000	34.0%
	Expense	\$ 548	\$ 10,392	5.3%
Accreditation				
	Income	\$ 9,730	\$ 38,725	25.1%
	Expenses	\$ 9,202	\$ 59,173	15.6%
Finance				
	Income	\$ -	\$ -	
	Expense	\$ 6,081	\$ 24,100	25.2%
Government Relations				
	Income	\$ -	\$ -	
	Expense	\$ 9,131	\$ 44,050	20.7%
Outreach				
	Income	\$ -	\$ -	
	Expense	\$ 446	\$ 4,250	10.5%
Technical Code Development				
	Income	\$ -	\$ -	
	Expense	\$ 22,437	\$ 104,500	21.5%
Emergency Management				
	Income	\$ -	\$ -	
	Expense	\$ 1,624	\$ 17,801	9.1%
Administration				
	Income	\$ 3,133	\$ 11,700	26.8%
	Expense	\$ 8,371	\$ 46,157	18.1%
Total				
	Income	\$ 172,437	\$ 1,320,225	13.1%
	Expense	\$ 242,799	\$ 1,416,550	17.1%

WABO - Summary
Profit & Loss
July through September 2022

	Jul - Sep 22
Ordinary Income/Expense	
Income	
Accreditation	
Accredited Code Official Progra	100.00
Total Accreditation	100.00
Bookstore	
Book Sales	11,575.71
Book Sales - ICC Sales	1,831.07
Shipping & Handling Income	802.35
Total Bookstore	14,209.13
Interest	
Money Market	39.01
Total Interest	39.01
Investment Income	
Dividends	3,093.60
Total Investment Income	3,093.60
Job Postings on Web Page	2,625.00
Membership Dues	195.00
Registrations	21,085.00
Returned Check Fee	25.00
Special Inspection	
Agency Applications	1,125.00
Agency Audits	140.00
Fabricators	
Fabricator Inital Application	700.00
Fabricator Renewals	650.00
Fabricators - Other	1,422.50
Total Fabricators	2,772.50
Key Personnel	1,760.00
Special Inspectors	15,627.35
Special Inspection - Other	0.00
Total Special Inspection	21,424.85
Welder Certification	
Weld Agency Apps & Renewals	130.81
Weld Agency Audit	580.00
Weld Applications and Renewals	107,485.00
Weld Examiner Apps & Renewals	1,395.00
Weld Test Records	50.00
Total Welder Certification	109,640.81
Total Income	172,437.40
Gross Profit	172,437.40
Expense	
Awards	1,107.48
B&O Taxes	2,074.96
Bank Charges	10.00
Bookstore Purch - COGS	8,538.59

WABO - Summary
Profit & Loss
July through September 2022

	Jul - Sep 22
Computer Expenses	
Computer Software	82.08
Web Page Fees	1,385.98
Computer Expenses - Other	778.58
	<hr/>
Total Computer Expenses	2,246.64
Credit Card Fees	4,657.21
Dues & Fees	
Membership Fees	0.00
	<hr/>
Total Dues & Fees	0.00
Executive Board	
Donations/ Other Agency Support	2,000.00
Meetings	12,031.29
Travel	7,674.88
	<hr/>
Total Executive Board	21,706.17
Lobbyist	9,000.00
Management Fees	131,044.98
Marketing/ Advertising	
Scholarships	26,571.45
	<hr/>
Total Marketing/ Advertising	26,571.45
Meeting Expenses	
Quarterly Meeting Expenses	
Meeting Scholarships	1,018.25
Quarterly Meeting Expenses - Ot...	10,524.07
	<hr/>
Total Quarterly Meeting Expenses	11,542.32
Meeting Expenses - Other	144.41
	<hr/>
Total Meeting Expenses	11,686.73
Postage and Shipping Expense	4,452.79
Printing	
Amendment Printing	74.68
Printing - Other	1,010.59
	<hr/>
Total Printing	1,085.27
Speaker/Presenters	1,242.50
Supplies	1,190.97
Tech Consultant Services	
Consultant Travel Fee & Expense	680.91
Fabricator Consultant	190.00
SIRP Consultant	2,945.00
Technical Code Consultant	10,383.12
Welder Consultant	827.50
	<hr/>
Total Tech Consultant Services	15,026.53
Telephone and Internet	886.13
Travel Expense	270.19
	<hr/>
Total Expense	242,798.59

WABO - Summary
Profit & Loss
July through September 2022

	<u>Jul - Sep 22</u>
Net Ordinary Income	-70,361.19
Other Income/Expense	
Other Income	
Unrealized Gain/Loss	-63,466.62
Total Other Income	-63,466.62
Net Other Income	-63,466.62
Net Income	<u><u>-133,827.81</u></u>

FINAL REPORT

CPP PROJECT 16166
1 AUGUST 2022



SPECIAL WIND REGION STUDY

Washington State and Columbia River

PREPARED FOR:

Structural Engineers Association of Washington
2150 N 107th St, Suite 205
Seattle, WA 98133

Scott Douglas, P.E., S.E.
Chair, SEAW Wind Engineering Committee
sdouglasscott@gmail.com

PREPARED BY:

Bill Esterday, PE, Principal
besterday@cppwind.com
Valerie Sifton, PEng, Associate Principal
vsifton@cppwind.com
David Banks, PEng, PhD, President
dbanks@cppwind.com

CPP, Inc.

7365 Greendale Road
Windsor, Colorado 80550, USA
Tel: +1-970-221-3371
www.cppwind.com



EXECUTIVE SUMMARY

The goal of this study was to examine the available wind data along the Columbia River, Washington Coast, and Olympic Peninsula to determine if a modification to the ASCE 7-16 and its successor ASCE 7-22 (*from this point forward, these 2 standards will collectively be referred to as “ASCE 7-16/22”*) special wind region (SWR) boundary is justified.

CPP has previously contributed to the determination of design wind speeds for SWRs in Colorado¹ and California^{2,3}, and David Banks led the effort to incorporate these modified SWRs into the recently published ASCE 7-22. In every instance, close examination of the wind data from these regions altered the SWR boundaries, eliminating portions of SWRs or expanding the boundaries elsewhere.

To the best of our knowledge, the wind map SWRs were added to the 1982 ANSI standard by a meteorologist who was a member of the committee at that time. Since then, no review of the SWRs along the Columbia River, Pacific Coast, or Olympic Peninsula has been conducted to our knowledge. We evaluated wind data from stations both inside the SWR and surrounding areas for comparison. In some cases, the SWRs extend into areas where there is no distinguishable difference in wind climate between the SWR and neighboring areas, and this is not surprising provided that the regions were created in 1982 with unknown basis.

This study confirms the need for the SWR along the Pacific Coast. Figure 1 shows the recommended SWR boundary. Strong low-pressure systems just offshore in the Pacific often bring high southerly winds along the coast. The resulting 10+ year Mean Recurrence Interval (MRI) speeds are greater than those provided for this region in ASCE 7-16/22 absent the SWR. We expect these high winds are often restricted to the immediate coastal area and rapidly decrease moving inland.

Our analysis found that a uniform design wind speed for the Washington Coast is a suitable reflection of winds brought by these low-pressure systems, and subsequently we recommend the following basic wind speeds for the entirety of the Washington Coast:

Risk Category (MRI)	Basic Wind Speed, \hat{U} (mph)
I (300 years)	115
II (700 years)	120
III (1700 years)	130
IV (3000 years)	135

¹ Colorado Front Range Gust map,

<https://seacolorado.org/docs/FINAL-COLORADO-FRONT-RANGE-GUST-MAP-2013.pdf>

² 2016 Kern County Code of Building Regulations, <https://kernpublicworks.com/wp-content/uploads/2020/01/2019-Kern-County-Code-of-Building-Regulations-FINAL.pdf>

³ Recommendations For Action To Address Design Wind Speed In California, <https://seaoc.site-ym.com/store/ViewProduct.aspx?id=9639114&hhSearchTerms=%2522special+and+wind+and+region%2522>

These wind speeds apply within a uniform distance from the coast to approximately 15 miles inland, which roughly matches the current SWR boundary. Our approximate 15-mile inland boundary is from the Pacific Coast, even in regions with inland bays as indicated in Figure 1.

Our study also found that the boundaries of the ASCE 7-16/22 Columbia River SWR encompassed many locations that do not have unusually high wind speeds compared to the ASCE 7-16/22 design speeds. As such, CPP recommends that the special wind region along the Columbia River be amended to follow the Risk Category design speeds from the ASCE 7-16/22 wind maps for all counties east of and including Cowlitz County in Washington. Due to the lack of weather stations in Wahkiakum County that would help define the transition and reductions from the strong coastal winds moving inland, we recommend the Washington Coast design wind speeds also be used in Wahkiakum County.

In Oregon, the Columbia County SWR designation can be removed and replaced to follow the Risk Category design speeds and MRIs from the ASCE 7-16/22 wind maps. The Clatsop County current SWR boundary should remain with design wind speeds of 120 and 130 mph for Risk Category II and III, respectively. The Clatsop County design speeds by Risk Category follow the Washington Coast recommendations.

Based on our experience with local AHJs and wind speed boundaries, it is typically more beneficial for the local authority when the wind speeds are defined at the county boundary as was done for the Columbia River SWR, even if the longitudinal position does not align across the river. If a longitudinal boundary is preferred, then we recommend -123.333° .

Similar to the Columbia River SWR, our study found that the Olympic Peninsula's eastern, north coast does not warrant a special wind speed designation. Only the western portion of Clallam County should remain as an SWR, and this region should follow the Washington Coast design speed recommendations by Risk Category. These regions should include Clallam Bay, Pillar Point, Beaver, and Forks; the SWR boundary transition in Clallam County is about 35 miles inland from the Pacific Coast at a longitude of -124.00° . The eastern regions of the county (Port Angeles, Lake Dawn/Foothills, Diamond Point, and Sequim) should follow the Risk Category design speeds from the ASCE 7-16/22 wind maps.

The CPP design wind speed recommendations are based on a three-second gust speed at 33 ft above the ground in Exposure C (open country) to follow the design basis of ASCE 7. Any locations where Exposure Category D (ocean and water surfaces) would be required, the velocity pressure coefficient (K_z) would effectively increase the wind speed and loads through the application of K_z by height.

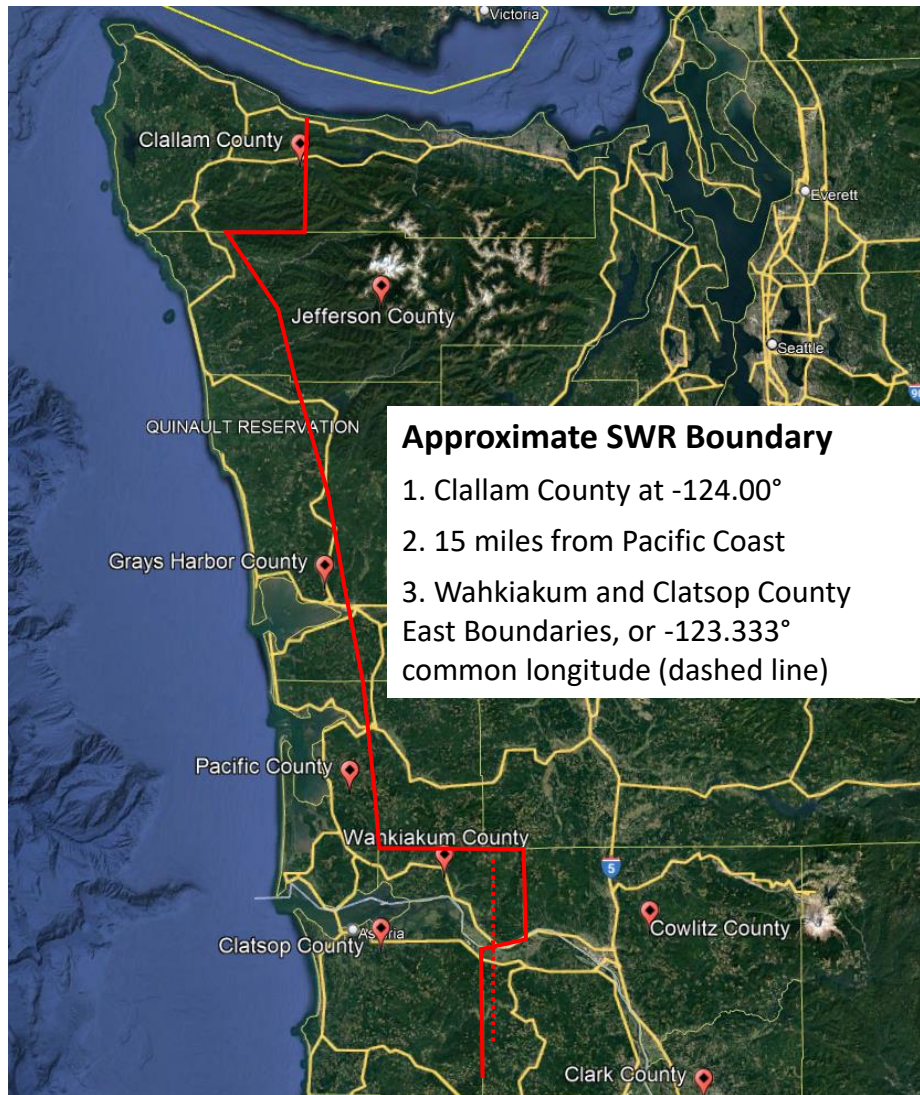


Figure 1. Washington State and Columbia River SWR boundary.

BACKGROUND

The American Society of Civil Engineers Standard, Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7-16/22) provides wind speed maps for use in the calculation of design wind loads for structures. These maps have, beginning with the 1982 ANSI standard, indicated the presence of special wind regions (SWRs) for which the typical mapped design speeds do not apply. ASCE 7 states that the SWRs account for “*known wind speed anomalies*” where speeds “*are substantially higher than the values indicated on the map*”. In other words, for these local areas, the regional wind speed patterns captured in the ASCE 7 wind maps are in theory not adequate. Possible reasons cited for these SWRs include “*winds blowing over mountain ranges or through gorges or river valleys*”, which could explain why the Columbia River and Olympic Peninsula were initially considered.

ASCE 7 does not indicate how to account for these wind speed anomalies, stating only that “*the authority having jurisdiction shall, if necessary, adjust the values given in Fig. 26.5-1 to account for higher local wind speeds. Such adjustment shall be based on meteorological information and an estimate of the basic wind speed obtained in accordance with the provisions of Section 26.5.3.*” Additional guidance from 7-16/22 includes, “*The basic wind speed shall be increased where records or experience indicate that the wind speeds are higher than those reflected in Figure 26.5-1.*”

WASHINGTON COAST

The ASCE 7 commentary mentions that the SWR along the Pacific Coast is due to limited data. “*Limited data were available on the Washington and Oregon coast. In this region, a special wind region was defined to permit local jurisdictions to select speeds based on local knowledge and analysis.*” Figure 2 shows the approximate boundary of the SWR along the Washington Coast. No specific wind speeds are prescribed in this region by ASCE 7-16/22, which leads to the local AHJs implementing their own requirements.

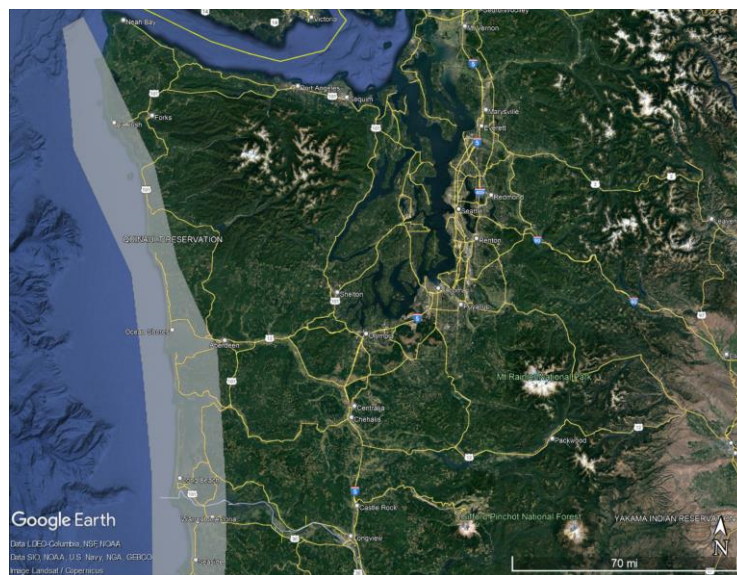


Figure 2. Washington Coast SWR approximate boundary as indicated in ASCE 7-16/22.

The Washington State coastal counties have implemented design wind speeds that range from 115 to 130 mph based on a Risk Category II classification (700-year MRI). The Grays Harbor County design wind speed of 115 mph (Risk Category II basis) along the coast is the single outlier in this SWR. The other three counties require 130 mph for a Risk Category II basis along the Pacific Coast, with Clallam County reducing this design speed to 120 mph at the Forks and Beaver locations.

COLUMBIA RIVER

Figure 3 shows the approximate boundary of the SWR along the Columbia River. Again, no specific wind speeds are prescribed in this region by ASCE 7-16/22, which leads to most local AHJs implementing their own requirements.

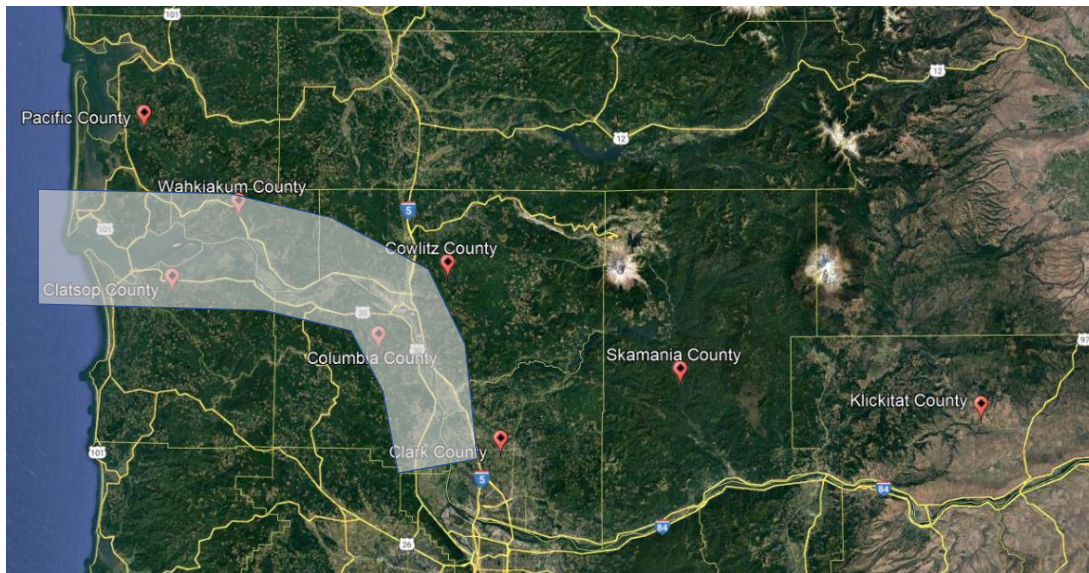


Figure 3. Columbia River SWR approximate boundary as indicated in ASCE 7-16/22.

The Washington counties of Pacific, Clark, and Skamania along the Columbia River have implemented design wind speeds above ASCE 7-10 and 7-16 (Figure 4). The design speeds in these counties range from 130 to 155 mph based on Risk Category classification. Cowlitz and Klickitat counties prescribe design speeds equal to 7-10 values. Wahkiakum is an outlier at 85 mph, which is likely based on the older ASCE 7-05 standard centered around a 50-year MRI, although the county does reference the 2015 International Building Code that uses ASCE 7-10 as the design basis for wind loads. The design wind speed of 85 mph does not match the 7-10 strength design level wind speeds and would require a load factor to convert to ultimate strength.

The Oregon counties of Clatsop and Columbia along the Columbia River have also implemented design wind speeds above ASCE 7-10 and 7-16 (Figure 4). The 2019 Oregon Structural Specialty Code (OSSC) lists the design speeds in these counties from 115 to 145 mph based on Risk Category I, II, III and IV classifications.

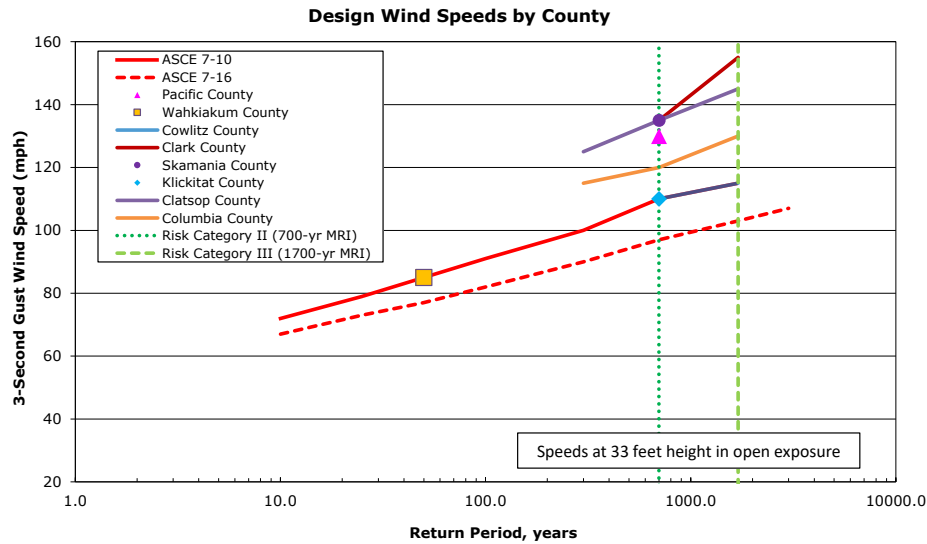


Figure 4. Local AHJ design wind speeds by county in the Columbia River SWR.

OLYMPIC PENINSULA

Figure 5 shows the approximate boundary of the SWR along the Olympic Peninsula. The Clallam County design wind speeds range from 110 to 130 mph based on a Risk Category II classification (700-year MRI). Again, the Pacific Coast speed of 130 mph is reduced to 120 mph at the Forks and Beaver locations. This design wind speed is further reduced to 110 mph at the eastern regions of the county (Port Angeles, Lake Dawn/Foothills, Diamond Point, and Sequim).



Figure 5. Olympic Peninsula SWR approximate boundary as indicated in ASCE 7-16/22.

METHODS

As recommended in ASCE 7-16/22, special wind regions as specified in the wind maps should be examined for unusual wind conditions per Section 26.5.2. When determining a site-specific wind speed,

Section 26.5.1 of ASCE 7-16/22 refers us to Section 26.5.3, called “Estimation of Basic Wind Speeds from Regional Climatic Data.” It states,

In areas outside hurricane-prone regions, regional climatic data shall only be used in lieu of the basic wind speeds given in Figure 26.5-1 when (1) approved extreme-value statistical-analysis procedures have been used in reducing the data; and (2) the length of record, sampling error, averaging time, anemometer height, data quality, and terrain exposure of the anemometer have been taken into account. Reduction in basic wind speed below that of Figure 26.5-1 shall be permitted.

Recommendations for reductions in basic wind speed below those in ASCE 7 are beyond the scope of this study. This study aims to identify regions of the Washington State SWRs with wind speeds above those in ASCE 7-10 and ASCE 7-16/22, and to quantify those speeds where possible.

During our study, we fulfilled both conditions (1) and (2). We have used approved procedures described by Palutikof et al. (1999), including the same extreme value statistical procedures that were used to develop the ASCE 7-16/22 wind speed map. Key staff at CPP were involved in the peer review of these wind maps, so we are familiar with their derivation. The recommendations in this study are based on the same kind of extreme value statistical analyses that provided the basis for the ASCE 7 wind maps over the past two decades (Peterka and Shahid 1998), with improved procedures for storm type separation and the use of multiple storms per year.

DATA SOURCES

The primary data used in this analysis originate from Automated Surface Observing System (ASOS) and Automated Weather Observation Systems (AWOS) anemometers. ASOS and AWOS stations were established by the United States government “to provide the nation a highly cost-effective, capable and reliable automated weather observing system for safe, efficient aviation operations and other applications” (U.S. Dept. of Commerce et al. 1998). These observing systems were implemented at over 900 U.S. airports throughout the mid-1990s through early 2000s.

Data quality generally significantly improves after ASOS and AWOS implementation because of the quality-assurance measures put in place. Mean wind data consist of two-minute averages. Gusts are generally 5-second averages, with most ASOS stations switching from cup to sonic anemometers (with 3-second averaging intervals) in the mid- to late-2000s. Reported gusts are the highest 5- (or 3-) second averages occurring in the previous 10 minutes. The datasets used in this analysis consist of mean and gust wind data recorded on average once-per-hour, with reports increasing to every 15 minutes or less when high wind speeds are present. This decreases issues with sampling error, ensuring that peak wind speeds are properly recorded when they occur.

ASOS and AWOS anemometers are most commonly standardized to a height of 33 ft, while some are located at 26 ft. A height adjustment was applied to the data as necessary for any anemometer not already located at 33 ft. The 5-sec-averaged gust speeds at each airport were increased to match the 3-sec-averaged gust speeds as necessary.

We reviewed the available wind data from the National Centers for Environmental Information (NCEI) for the ground-based weather stations located near and inside the SWRs to gain an understanding of the wind climate in this area. Several stations identified in the region were excluded because of low data completeness, or the length of period of record was too short to produce a reliable result. After analysis some stations were deemed unrepresentative, and their results were excluded. A complete list of stations considered, and which ones were included is provided in Appendix A. The TD3505 (hourly data) were used in this analysis along with the peak wind from the METAR observation reports. The NCEI recommends that the GHCN⁴ peak daily data be used to predict peak gust speeds, rather than the TD3505 (Seiderman, 2015). These records generally do not match perfectly and using the METAR observation report negates any concern. The ASCE 7-16/22 wind maps are based on TD3505 data. This is because it is easier to isolate peak gusts due to thunderstorms in the hourly data, which is necessary for storm-type separation (see below).

In addition to the hourly data from NCEI, one-minute gusts were also analyzed. The one-minute data were compared to the hourly data but were found to often have missing data during some storm events. As with the hourly data, the one-minute ASOS data were subjected to the same quality control and statistical analysis procedures. The recommended wind speeds in this report consider all the available data. By implementing the use of multiple data sets, we are confident in the quality of the data and extreme wind speeds used in our analysis that ultimately guide our recommendations.

As part of our quality assurance, thorough quality control (QC) procedures were performed on all data to determine what extreme speeds are reliable for an extreme value analysis. As typical, there were several outliers where the wind data were not considered reliable and thereby not utilized. The first step of our process is to remove erroneous data points, of which an example is provided in Figure 6. Gust speeds (red circles) of 20 mph were reported around 4am, followed by a significant increase to 100 mph by a single measurement point without a corresponding increase in mean wind speed (blue dots). This extremely high gust speed is erroneous, which is also confirmed by the one-minute gusts (small light red squares) that did not exceed 25 mph around the time of the erroneous gust observation.

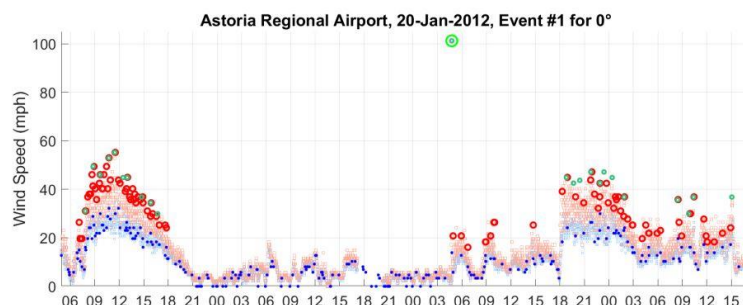


Figure 6. Time series of wind speeds for quality control.

⁴ GHCN data is described here:

http://www1.ncdc.noaa.gov/pub/data/cdo/documentation/GHCND_documentation.pdf

No wind speed data other than from NCEI airport anemometers was used, as it was outside of the scope of this study to analyze such anemometers and perform quality checks on the data. It is possible that there are specific locations where the river gorge creates significant channeling for some wind directions. This kind of channeling, however, was not obvious in the observations we analyzed. Identifying areas of channeling would be better served by site specific topography simulations (as would the base for exposed mountain tops or ridges, see below) rather than a blanket of uncertain wind speeds extended several miles on either side of the river.

SEPARATING BY STORM TYPE

It is well known that different storm types will produce different extreme wind probability distributions. This is one reason why hurricane winds have traditionally been analyzed separately from other wind events. The analyses for the wind maps in ASCE 7-16/22 also isolate thunderstorms, and Figure 7, taken from the ASCE 7-16 wind map “Rationale for Changes” document, indicates that thunderstorms are not expected to be significant in the Pacific Northwest.

Storm separation has been performed for this study, and indeed thunderstorms winds were much less severe than other types of wind events at all stations examined. Thunderstorms were identified by reviewing the directionality of each storm as well as the duration; thunderstorms produce a rapid increase in wind speeds and can last from a couple of minutes to several hours. As estimated by ASCE 7 and shown in Figure 7, our analysis confirms that the occurrence of thunderstorms is low and does not significantly contribute to the controlling design wind speeds in or near these SWRs.

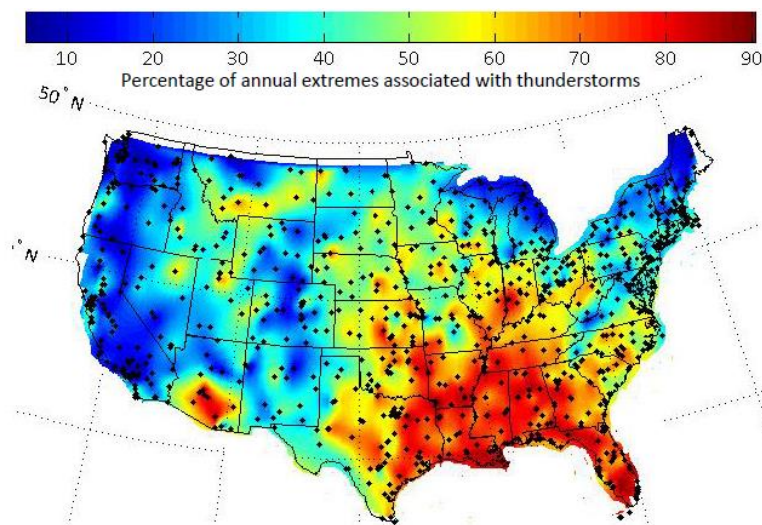


Figure 7. *Percentage of annual extreme wind speeds associated with thunderstorms, a rationale for 7-16 wind map.*

EXTREME VALUE CURVE FITS

The extreme value analysis methods used in this study are well described in Palutikof et al (1999). We have assumed a Fisher–Tippett Type 1 generalized extreme value distribution, also known as the Gumbel

distribution. This is potentially conservative for MRIs longer than 300 years, as the severity of winds for any given storm type is not unlimited.

In this study, we fit peak wind gust data to this distribution using a Weighted Least Squares (WLS) method. This is a graphical method with an alternative fitting strategy to account for the error associated with each point being greatest for the largest extremes. As there were generally too many points for the Lieblein BLUE method, we employed a Monte Carlo simulation to determine the expected errors for each point. The normalized errors were then minimized using least squares. The reduced variate (based on the recurrence intervals) was unbiased using Gringorten's formula, as described by Palutikof et al (1999). There are other methods of fitting the data, including a linear least squares fit, the Maximum Likelihood Estimates (MLE), and the Method of Moments (MoM). The predictions from these three methods typically varied by under 5%.

The WLS fitting technique described above was applied to both annual peak gusts, and to peak wind gusts from independent storms. The results of this Method of Independent Storms (MIS) also vary with the number of storms selected. We have followed the recommendations of Cook (2014) and limited the fitting range to roughly 3 storms per year. The selection of data used in the fitting introduces an uncertainty of around 5%.

The largest source of uncertainty, however, is typically the duration of the weather record. A graph of extreme wind speeds from the Astoria Regional Airport and their associated return periods is shown in Figure 8. The Monte Carlo simulation used in the WLS method is also used to interpret the significance of variability in the data (i.e. to examine the goodness-of-fit). If the fit is accurate, then 95% of time the wind speeds should fall between the red lines in Figure 8. There is only a 5% chance that a data point will lie either above or below these lines – 2.5% on each side, so points outside these lines generally indicate a poor fit.

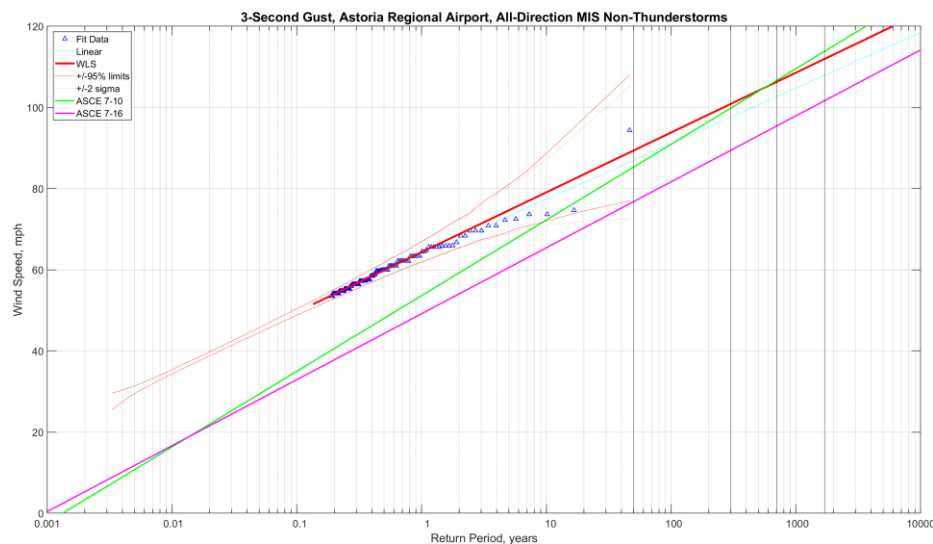


Figure 8. Gumbel fit to non-thunderstorm wind events at Astoria Regional Airport.

LONG TERM MRI EXTRAPOLATION

To improve the accuracy of the 700-year MRI wind speed predictions, multiple nearby weather stations can be combined to form a “superstation” (Peterka and Shahid 1998). However, stations that have significantly different wind conditions cannot be combined in this manner. Because the River Valley winds change rapidly with distance from the mountains and valleys, creation of superstations was not possible for this analysis. However, there were generally enough data to reliably predict the 50-year wind speed.

Extrapolation from 50-year to MRI's longer than 300-years has inherent uncertainty but is more accurate than applying a uniform load factor to all wind climates. It is generally considered conservative to use a linear Type I fit to the data (as we have done here), as wind speeds are not expected to indefinitely increase linearly with the log of the MRI; eventually, some meteorological or physical limit is approached. For this reason, some researchers have suggested a Type III fit, with a wind speed plateau, is more appropriate (for example, see Holmes and Moriarty 1999).

WIND CLIMATE ANALYSIS RESULTS AND RECOMMENDED SWR CHANGES

WASHINGTON COAST

Historic peak gust records from the airports along the Washington Coast SWR (Figure 9) were used in the analysis of local peak gust design wind speeds. It was found that this region often experiences powerful midlatitude or extratropical cyclones (ETCs). These low-pressure weather systems regularly produce intense storms over the Pacific Ocean that routinely impact the Pacific Northwest coast. While the cool waters of the Pacific prevent tropical cyclones from reaching the shores of the Pacific Northwest, ETCs often develop in this region. The analysis from this study confirms that these synoptic storms determine the design wind speeds along the Washington Coast. Figure 10 shows the variation of wind speed with MRI using a Gumbel (Type I) distribution. The return period is plotted on a logarithmic scale to permit examination of wind speed over a wide range of MRIs.

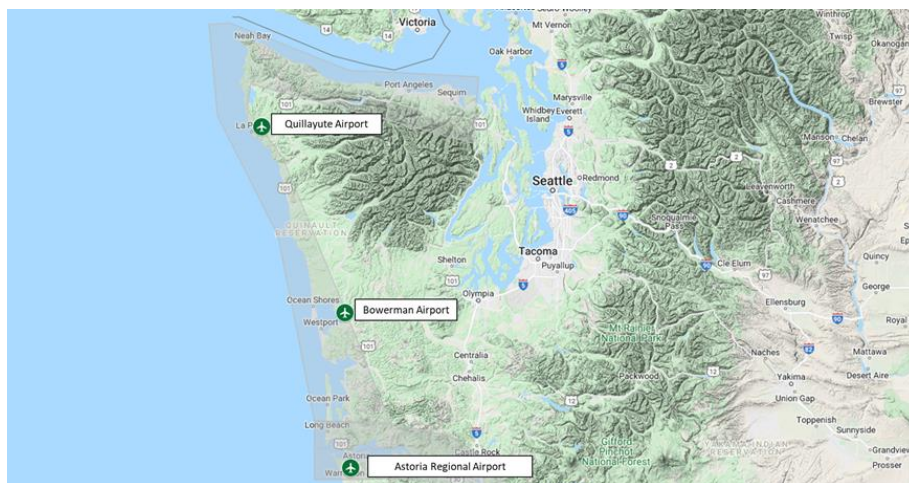


Figure 9. Location of weather stations along the Washington Coast.

After accounting for exposure, the analysis from each of the airports along the Washington Coast confirms that the coast does indeed warrant a SWR as the all-direction \hat{U}_{700} (Risk Category II) and \hat{U}_{1700} (Risk Category III) design wind speeds are above the ASCE 7-16 values of the immediate area. Considering this, and that the ETCs are expansive and can impact the entire coast, we recommend a uniform \hat{U}_{700} of 120 mph along the coast to encompass these impacts. The design wind speed recommendations by Risk Category are provided in the Executive Summary.

The synoptic-scale events that cause these high winds along the coast have rapidly decreasing impacts moving inland, reserving the strongest winds to the immediate coastline. While we recommend the SWR along the Washington Coast remain, we have recommended modifications to the extension of this coastal SWR into the Columbia River and Olympic Peninsula in consideration of this rapid decrease in winds moving inland.

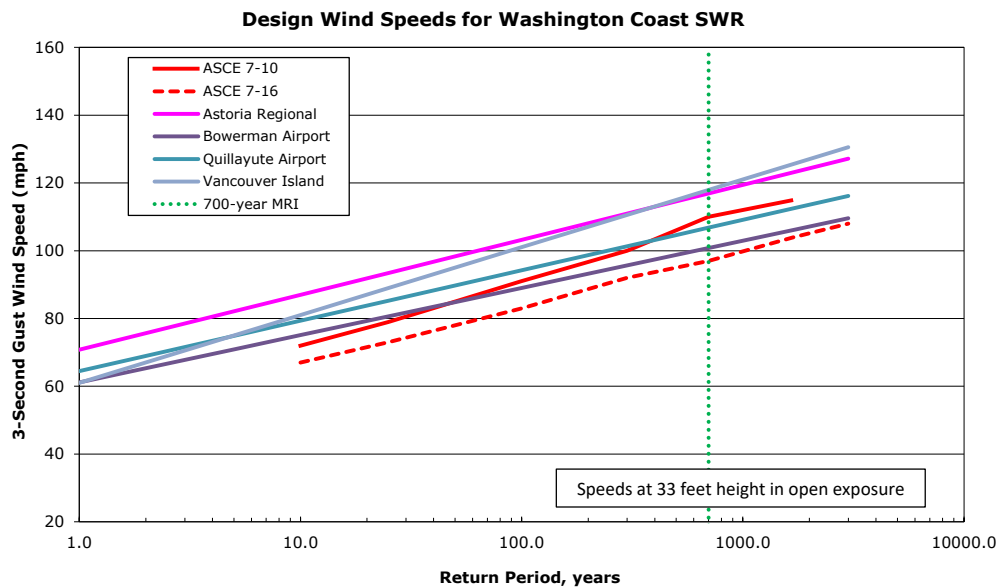


Figure 10. Gumbel fits to non-thunderstorm wind events for all airport meteorological stations along Washington Coast.

COLUMBIA RIVER VALLEY

Historic peak gust records from the airports along the Columbia River SWR (Figure 11) were used in the analysis of local peak gust design wind speeds. Synoptic storms, including ETCs, determine the design wind speeds in the Columbia River Valley. Figure 12 shows the variation of wind speed with MRI using a Gumbel (Type I) distribution. Again, the return period is plotted on a logarithmic scale to permit examination of wind speed over a wide range of MRIs.

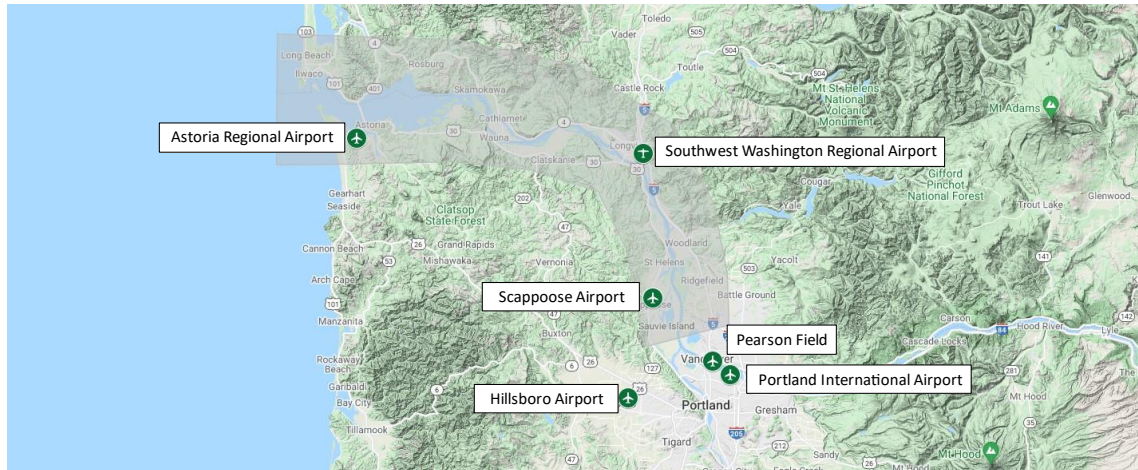


Figure 11. Location of weather stations along the Columbia River.

The all-direction \hat{U}_{700} (Risk Category II) and \hat{U}_{1700} (Risk Category III) design wind speeds are below the ASCE 7-16 values at all the locations except for Astoria Regional Airport (Figure 12). Wind speeds at Portland International, which was included in the ASCE 7-10 SWR, are a good match to the ASCE 7-16 wind map values. The Portland area was excluded from the SWR in ASCE 7-16. The other stations show design speeds below the Portland International analysis, indicating that the SWR designation can be removed for most of the counties along the Columbia River.

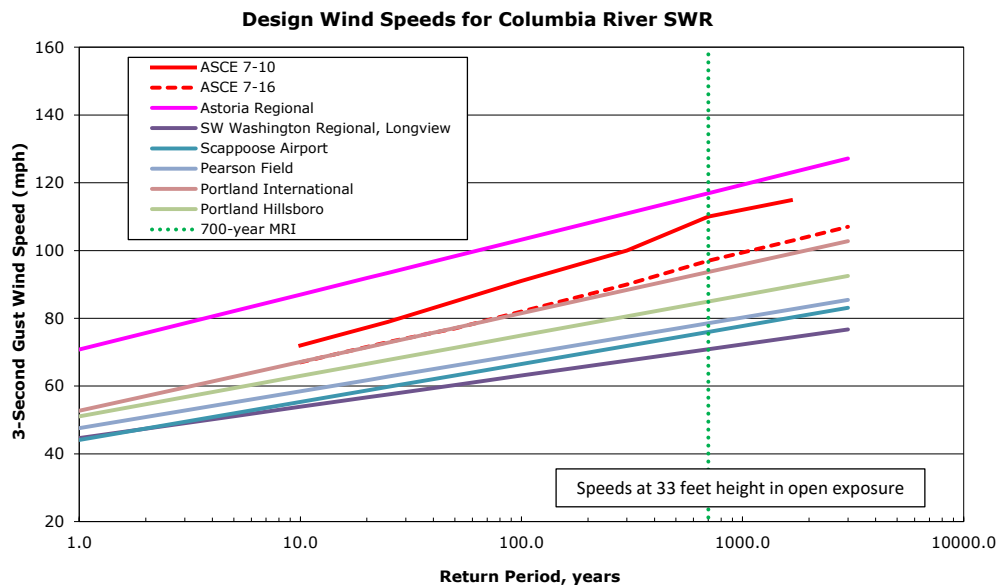


Figure 12. Gumbel fits to non-thunderstorm wind events for all airport meteorological stations along Columbia River.

Astoria Regional Airport, located at the mouth of the Columbia River on the Washington Coast, revealed design wind speeds higher than ASCE 7-16 and confirms that the Washington Coast does warrant a SWR. Considering these higher wind speeds measured at Astoria, we researched the weather

history of the Pacific Northwest to determine if any unique conditions or weather patterns could create a special wind region designation along the Washington coastline that would extend into the Columbia River. To verify the extent of these extreme events, CPP compared the largest storm events measured at the Astoria Regional Airport to the other anemometers in the Columbia River SWR. The Great Coastal Gale of 2007 impacted Astoria on December 3, 2007, with peak gust wind speeds up to 95 mph. For comparison, the other stations in the Columbia River SWR measured much lower gust speeds (ranging from 40 to 50 mph) during this storm event (Figure 13). This provides evidence that these strong weather events do not produce similar wind speeds farther inland. Other large wind events show similar trends, such as the Hanukkah Eve windstorm of 2006.

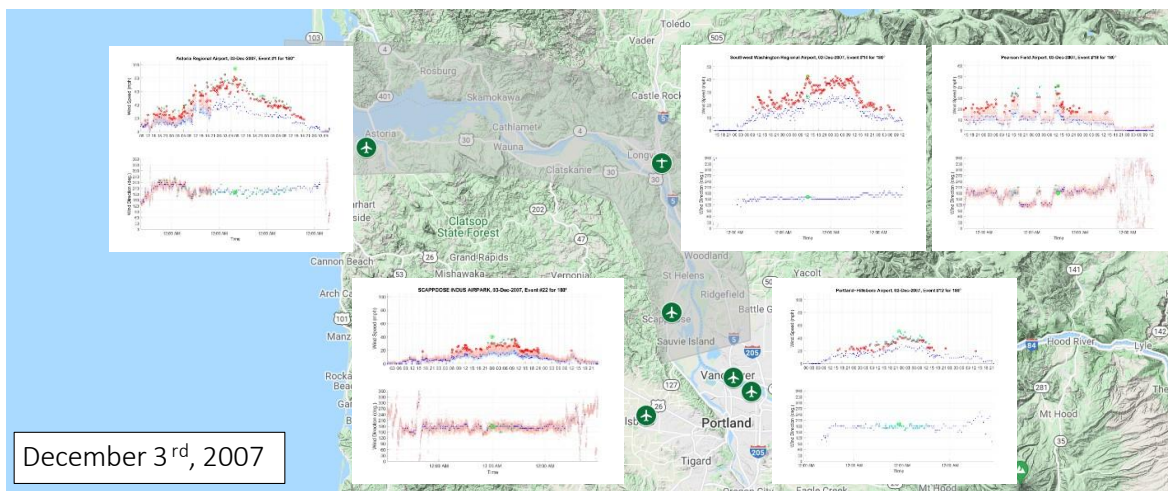


Figure 13. Regional wind speeds during the 2007 Great Coastal Gale.

The Ides of October storm of 2016, which became extratropical from the remains of Typhoon Songda, serves as another example of how speeds rapidly decrease as you move away from the coast. A map depicting surface winds from the NCEP Reanalysis dataset in Figure 14 show that the system generated the largest wind speeds along the coast with vastly reduced speeds moving inland along the Columbia River. While this imagery is beneficial to our analysis and confirms the overall wind climate patterns, the anemometer observations were used to determine the recommended all-direction wind speeds.

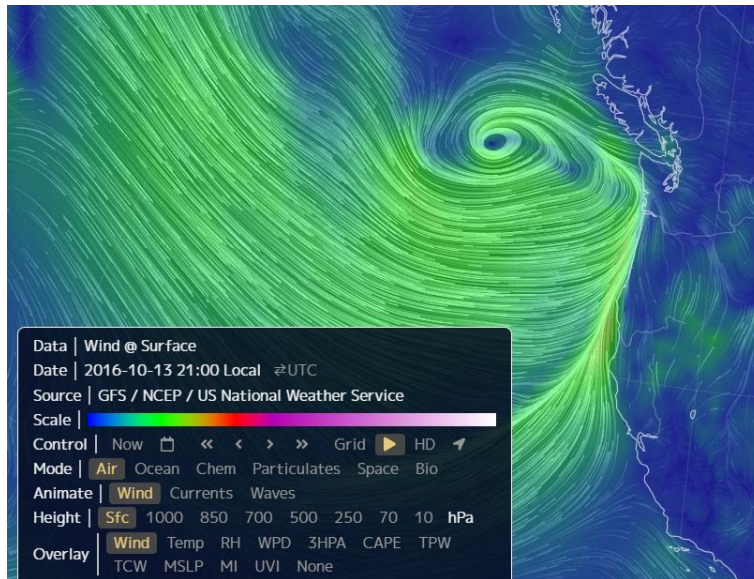


Figure 14. Surface winds from the NCEP Reanalysis dataset during the October 2016 storm.

We recommend that the special wind region along the Columbia River be amended to follow the Risk Category design speeds from the ASCE 7-16 wind maps for all counties east of and including Cowlitz County in Washington. Due to the lack of weather stations in Wahkiakum County that would help define the transition from the strong coastal winds, we recommend that the Pacific County design wind speeds also be used in Wahkiakum County.

In Oregon, the Columbia County SWR designation can be removed and also replaced to follow the Risk Category design speeds from the ASCE 7-16 wind maps.

If a longitudinal boundary is preferred over the offset, eastern boundaries of Wahkiakum and Clatsop Counties, then we recommend a longitude value of -123.333° .

Historic peak gust records from additional weather stations along the Columbia River between Portland and Dallesport (Troutdale, Hood River, and Columbia Gorge Regional Airport) were also included in the design wind speed analysis, see Appendix A. As indicated in ASCE 7-16/22, this region does not appear to warrant a SWR from the limited wind speeds measured at these ASOS and AWOS stations. Troutdale speeds are similar to Portland International, Hood River lacks historic wind data, and the Dallesport all-direction design wind speeds are below the ASCE 7-16/22 values across all Risk Categories.

OLYMPIC PENINSULA

Figure 15 shows the location of historic peak gust records from the airports along the Olympic Peninsula SWR that were used in the analysis. As with the Columbia River and Washington Coast SWRs, synoptic scale systems, including ETCs, determine the design wind speeds for the Olympic Peninsula region.

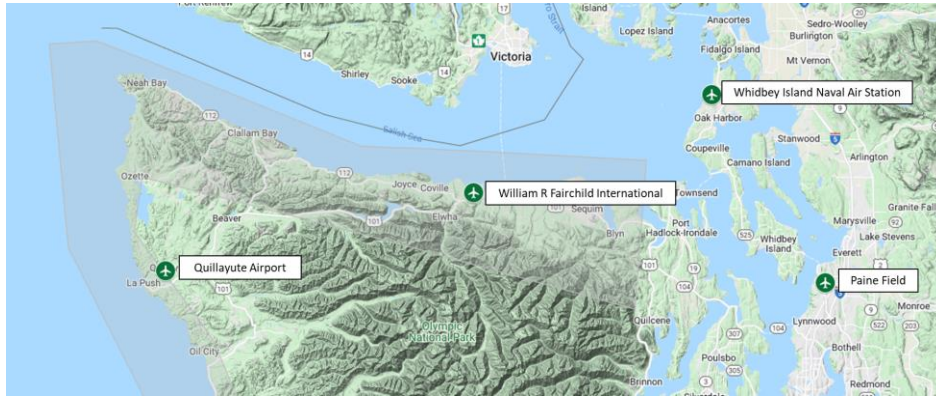


Figure 15. Location of weather stations along the Olympic Peninsula.

Figure 16 shows that the all-direction \hat{U}_{700} (Risk Category II) and \hat{U}_{1700} (Risk Category III) design wind speeds are below the ASCE 7-16 values at all locations, except Quillayute along the Pacific Coast. The lowest design wind speeds were from William R Fairchild International, an airport at the base of Olympic National Park meeting the Salish Sea, and in the center of the Olympic Peninsula SWR. The design wind speeds from the more eastern airports, Whidbey Island Naval Air Station and Paine Field, are significantly higher, although still below ASCE 7-16, and those are located outside of the SWR.

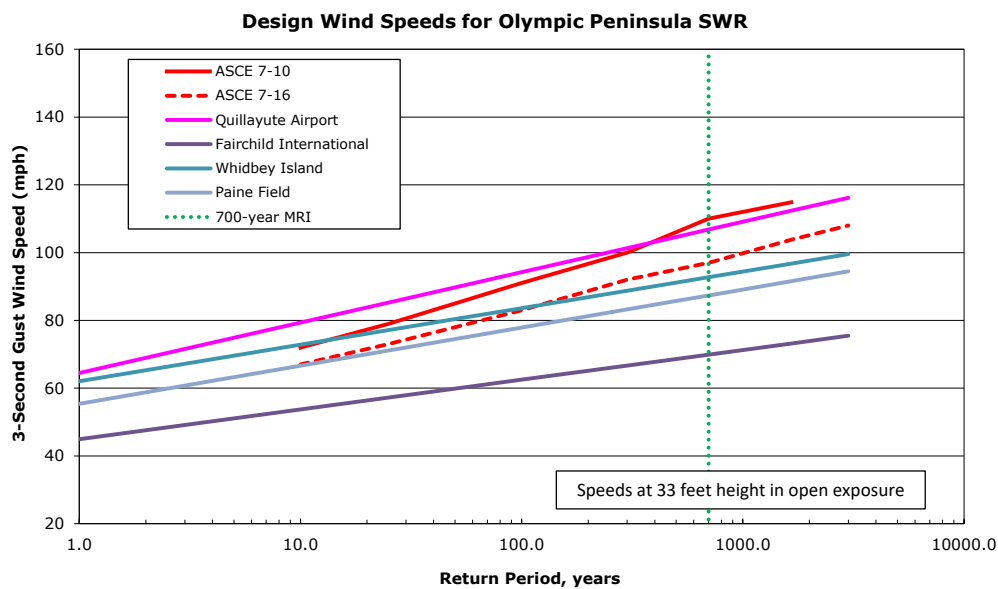


Figure 16. Gumbel fits to non-thunderstorm wind events for all airport meteorological stations along the Olympic Peninsula.

From our knowledge of this region and supported by the local airport data, we hypothesize that the Olympic mountains prompt channeling of the strong southerly winds often observed from the ETCs, leaving the northern edge of the Olympic Peninsula with low wind speeds as the greater wind speeds are diverted to the Washington Coast and Puget Sound. This phenomenon is so common that often, the

highest wind events at Astoria Regional Airport along the Washington Coast only see winds of less than 30 or 40 mph at William F Fairchild International, as visualized by reanalysis data in Figure 17.

Considering this channeling, we recommend the Olympic Peninsula SWR be modified to only encompass the western portion of Clallam County, with an approximate boundary about 35 miles inland from the Pacific Coast at a longitude of -124.00°.

Again, only the western portion of Clallam County should remain as an SWR, and this region should follow the Washington Coast design speed recommendations by Risk Category.

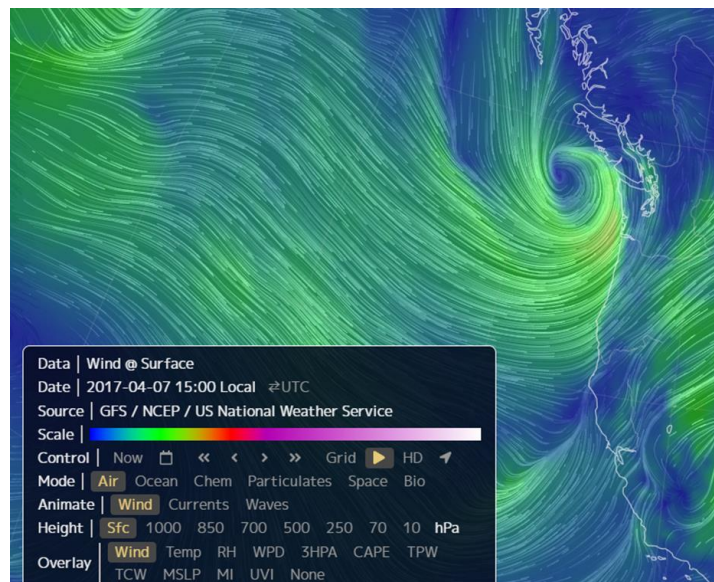


Figure 17. Surface winds from the NCEP Reanalysis dataset demonstrating the channeled southerly winds around the Olympic Peninsula towards the Washington Coast and Puget Sound.

LIMITATIONS

It is not certain what the basis was for the original designation in the 1982 standard of several miles on either side of the Columbia River as a SWR. It seems plausible that it was “winds blowing ... through gorges or river valleys” as stated in ASCE 7. The airports we have examined within this SWR show no evidence of winds that are more severe than those recommended in ASCE 7-16/22 for the region. It is possible that there are specific locations where the river gorge creates significant, localized channeling for some wind directions.

The mountainous regions of the counties along the Columbia River do not contain any NCEI wind stations. Based on the terrain and our experience, it is likely that some of the mountainous regions might experience higher wind speeds, although the topographic factor (K_{zt}) in ASCE 7 is likely to capture the wind speed-up effects at hilltop locations for such topographic features.

Since the focus of this study is on the indicated SWRs, we did not attempt to estimate the wind speeds in the mountainous regions of each county. If you anticipate that there will be developments in

these regions that will require more precise wind values, further data collection and analysis will be required.

Climate change is an ongoing topic of conversation in the wind engineering community as it relates to the prediction of design wind speeds. In their fifth assessment report from 2013, the Intergovernmental Panel on Climate Change (IPCC) has stated that anthropogenic climate change is projected to alter tropical cyclone intensity and frequency, which would apply to hurricanes and cyclones. Currently, the only wind loading standard which accounts for this anticipated effect is the recent release of the Australian/New Zealand Standard (AS/NZS 1170.2:2021). The climate change multiplier in this standard is only applicable to regions where the dominant extreme winds are from tropical cyclones. CPP is unaware of a reliable method to accurately quantify how climate change will affect the likelihood of future severe synoptic storms in the Pacific Northwest.

RECOMMENDATIONS FOR FURTHER WORK

Topographic simulations could be used to assess any significant channeling or wind speed-up effects more accurately in complex terrain. A terrain study would allow these effects to be identified with the use of Computational Wind Engineering (CWE). CWE simulations are useful in situations where anomalies such as terrain (hills and valleys) are known to influence wind speed and direction on a very localized basis. CWE encompasses the correct use of computational fluid dynamics (CFD) solvers for wind engineering purposes following industry standard methods. Special considerations related to atmospheric boundary layer flows and bluff body aerodynamics differentiate these CWE simulations.

Due to the lack of weather stations that would help define the transition and reductions from the strong coastal winds moving inland, we recommend an additional study using ERA5-land. The ERA5-land dataset provides 3-dimensional gridded meteorological data starting in 1973 to present that is comprised of advanced weather model output that is calibrated using global in-situ and remote sensing historical observations. It is constructed on the European Centre for Medium-Range Weather Forecasts model (ECMWF) and provides hourly meteorological variables on a 9 km grid resolution. Using this dataset to define the coastal transition more accurately would be the goal of this additional study.

REFERENCES

- ASCE, 2010. *Minimum Design Loads for Buildings and Other Structures*. ASCE 7-10, American Society of Civil Engineers (ASCE) Reston, VA.
- ASCE, 2016. *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*. ASCE 7-16, American Society of Civil Engineers (ASCE) Reston, VA.
- ASCE, 2022. *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*. ASCE 7-22, American Society of Civil Engineers (ASCE) Reston, VA.
- AS/NZS 1170.2 (2021), "Structural Design Actions, Part 2: Wind Actions," Australian/New Zealand Standard.
- Christensen, J.H., K. Krishna Kumar, E. Aldrian, S.-I. An, I.F.A. Cavalcanti, M. de Castro, W. Dong, P. Goswami, A. Hall, J.K. Kanyanga, A. Kitoh, J. Kossin, N.-C. Lau, J. Renwick, D.B. Stephenson, S.-P. Xie and T. Zhou, 2013: Climate Phenomena and their Relevance for Future Regional Climate Change. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Cook, N. J. (2014) "Consolidation of analysis methods for sub-annual extreme wind speeds", *Meteorological Applications* 21: 403–414.
- Harris, R. I. (1999). "Improvements to the Method of Independent Storms". *Journal of Wind Engineering and Industrial Aerodynamics*, 80(1), 1-30.
- Holmes, J.D. and Moriarty, W.W., (1999) "Application of the generalized Pareto distribution to extreme value analysis in wind engineering", *Journal of Wind Engineering and Industrial Aerodynamics*, 83, 1-10.
- Levitan, M., and Vickery, P. (2014) "Attachment 3: New Wind Maps Proposal Rationale, Data, Methods, and Verification" from *Proposal to Revise the 2010 Edition of ASCE/SEI 7*, submitted to the ASCE 7 Standards committee on 3/10/2014.
- Oregon Structural Specialty Code (2019), Based on the 2018 International Building Code, (OSSC 2019).
- Palutikof, J. P., B. B. Brabson, D. H. Lister, and S. T. Adcock, (1999) "A review of methods to calculate extreme wind speeds". *Meteorological Applications*, 6, 119–132.
- Peterka J.A. (2006), "Colorado Front Range Gust Map", CPP Inc. report for use by Colorado Structural Engineers Association and Colorado Front Range communities. CPP Inc., Fort Collins, CO.
- Peterka, J.A. (1992), "Improved Extreme Wind Prediction for the United States," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 41, pp. 533-541.
- Peterka, J.A. and Shahid, S. (1998), "Design Gust Wind Speeds for the U.S.," *ASCE Journal of Structural Engineering*, Vol. 124, pp. 207-214. American Society of Civil Engineers (ASCE) Reston, VA.
- Searer et. al, SEAOSC Summary Report (2010), *Study of Historical and Design Wind Speeds in the Los Angeles Area*. Structural Engineers Association of Southern California (SEAOSC) Los Angeles, CA.

APPENDIX A: LIST OF WEATHER STATIONS FROM NCEI

Station Name	Latitude	Longitude	Elevation (m)	Excluded from results
ASTORIA	46.21	-123.77	2	✓
ASTORIA REGIONAL AIRPORT	46.16	-123.88	3	
AURORA STATE AIRPORT	45.25	-122.77	60	
BOWERMAN AIRPORT	46.97	-123.93	4	
DALLESFORT-COLUMBIA GORGE REGIONAL	45.62	-121.17	71	
DESTRUCTION IS. WA	47.68	-124.49	21	
HOOD RIVER-KEN JERNSTEDT AIRFIELD	45.67	-121.53	192	✓
KELSO-LONGVIEW AIRPORT	46.12	-122.89	6	
LA PUSH	47.92	-124.63	3	✓
NEAH BAY	48.37	-124.62	5	✓
PEARSON FIELD AIRPORT	45.62	-122.65	7	
PORT ANGELES	48.13	-123.44	5	✓
PORT ANGELES CGAS	48.14	-123.41	4	
PORT TOWNSEND	48.11	-122.76	5	✓
PORTLAND INTERNATIONAL AIRPORT	45.60	-122.61	7	
PORTLAND-HILLSBORO AIRPORT	45.55	-122.96	60	
PORTLAND-TROUTDALE AIRPORT	45.55	-122.41	8	
QUILLAYUTE AIRPORT	47.94	-124.56	56	
RACE ROCKS CAMPBELL SCIENTIFIC BC	48.30	-123.53	3	
SCAPPOOSE INDUS AIRPK ARPT	45.77	-122.86	15	
SHERINGHAM POINT BC	48.38	-123.92	22	
SMITH ISLAND WA	48.32	-122.84	15	✓
TATOOSH ISLAND WA	48.39	-124.74	31	✓
TILLAMOOK AIRPORT	45.42	-123.82	11	
WILLIAM R FAIRCHILD INT AP	48.12	-123.51	83	
SNOHOMISH CO	47.90	-122.28	185	
WHIDBEY ISLAND NAS	48.35	-122.67	14	



2023 WABO Legislative Positions

- **Funding for State Building Code Council:** The Washington State Building Code Council (SBCC) is mandated by state law to develop the construction codes used in Washington and that effort requires adequate funding to accomplish their mission. WABO supports continued adequate funding, the ability to readily access funding, and clarification for consistent fee application by local jurisdictions.
- **Protect Local Authority:** WABO supports protecting local authority to amend, adopt and administer construction codes.
- **Code Cycle:** WABO supports keeping Washington consistent with the national model code adoption cycle.
- **Consumer Protection:** WABO supports measures to protect the public from unqualified and illegal contractors, such as requiring contractor training and education, and establishing minimum qualification standards for contractors and Building Officials.
- **Electrical Code:** WABO supports legislation that provides jurisdictions with equal authority to develop and adopt the Washington State Electrical Code.
- **Unfunded Mandates:** WABO recognizes that jurisdictions have limited fiscal capacity and opposes unfunded and under-funded mandates.
- **Seismic Retrofit:** WABO supports legislation to assist building owners to retrofit existing seismically vulnerable buildings, in order to protect the public during an earthquake from collapsing structures, and to reduce the impact of seismic events by focusing on promoting economic resiliency of our communities.
- **IPC (International Plumbing Code):** WABO supports legislation to reduce barriers for jurisdictions to use the International Plumbing Code.
- **Certification and Training:** WABO supports improving the efficiency of the construction permit and inspection process with training and certification for code officials and code technicians.
- **Affordable Housing:** WABO supports efforts to create more affordable housing as long as that housing complies with minimum codes to ensure a safe built environment.
- **Energy Code Implementation.** WABO supports legislation that promotes resource allocation for effective implementation via plan review and inspections of the WA State Energy code.



2015 WABO Strategic Plan

Revised 2022

The Washington Association of Building Officials (WABO) is a non-profit professional trade association. The membership consists of Building Officials in the State of Washington and Associate Members who are dedicated to effective code administration, and safe building and design practices. This strategic plan has been developed by the membership to help guide the association in realizing success in accomplishing its mission.

WABO Mission Statement:

Leading the way to excellence in building and life safety.

Vision

WABO will help lead Washington State to be known as the best place for citizens to live and business to thrive in a built environment that is safe and resilient.

The Future

The future will look quite different than it does now. WABO has looked into the future by recognizing trends today that will affect the directions that building construction, design, and code administration take. Continual monitoring of these trends and the strategic initiatives that WABO undertakes will help assure that the association's mission and vision will be achieved.

What will the future look like?

Social

- There will be an aging population who represent diverse socio-economic status. Their needs will bring many challenges to all service providers. There will be increased density in cities. This could lead to higher crime rates.
- Home based employment will increase along with increased telecommuting.
- There will be a changing work force. Education and globalization together with

a more mechanized method of working will change the character and means of work and increase the sophistication of our business.

- There will be more unconventional housing arrangements due to the economic and cultural changes.

Land Use

- An increase in small lot development and clustering near economic bases will occur.
- Densification of urban areas with mixed use buildings and increased multi-family housing will occur.
- Increased pressure for environmental preservation, rural areas preserved for green spaces, and land banking will become prevalent.
- Houses and apartments will become smaller to provide affordability.
- Growth management laws will be revised to more effectively manage growth and development.

Infrastructure

- Water availability issues will play a larger role in driving development location and type.
- Transportation issues will continue to worsen. Alternatives such as elevated transportation systems will become viable.
- Storm and sanitary systems will be stretched to their limits.
- Solid waste management will play a larger role in development decisions.
- Sustainability will continue to be a big issue.

Technology

- Electronic permitting, plan review, and inspection management (wireless) will become standard procedure.
- Cyber- review and design (internationally) will occur.
- Telecommuting will increase.
- Remote training and on-line education will replace classroom style training.
- The metric system will be adopted.
- 3-D design will increase.
- Wet-stamped plans will be replaced by electronic methods.
- A paperless workplace will become a reality.

Political

- Seamless coordination and interagency cooperation will occur.
- Code officials will become community leaders.
- Building departments will be viewed as public safety agencies.
- Government will become smaller, resulting in more contracted services and self-certification.
- Building officials will be working in an increasing polarized political environment.

Design/Construction

- Global design will occur, breaking down borders. Licensing could become international.
- Green building technology will become industry standard.
- Designers, builders, etc. will directly participate in code compliance.
- Performance based design will become industry standard.
- New products and materials will change construction technology.
- Security will drive design.
- National standards will become a reality.

The Code Official

- Outsourcing of plan review and inspection services will increase.
- Building department staff will decrease.
- Regional approaches will become prevalent.
- Statewide certification of building department personnel will be required.
- The role of the code official will change to an upper-level management position.
- Regionalization of services will occur.
- Services will become more streamlined and responsive.

The Preferred Future

The preferred future is one in which WABO will be a leader in partnerships that are holistic and inclusive. Ones which build relationships that meet the needs of the community (the public), stakeholders in the construction industry, and the businesses which provide for the economic well-being of the community.

WABO will prepare for the future by assisting in the leveraging of technology to optimize staff efficiency and consistency in providing public services; assist in building one stop shopping for public services; and help increase building department transparency.

WABO will be a leader in the advancement of technology which will further electronic processes and enhance e-commerce.

WABO will be a provider of education for the furtherance of safe and viable building design and construction practices, WABO will pursue and implement the Code Official Degree Program.

WABO will be recognized as a leader locally, regionally, and nationally.

Strengths

WABO has many strengths on which to build. These strengths will carry the association forward to a successful future. The greatest strength is the voting membership and the associate members. They have the creativity, professionalism, experience, and knowledge to accomplish the association's mission.

Building on the momentum of a strong legacy of success, WABO has built the ability to share and gain consensus through its values and relationships. The membership shares a visionary approach to the future. WABO has built a strong national recognition and achieved a high level of participation. WABO enjoys a leadership role in code development, legislative involvement, and the promotion of consistency.

WABO's strengths also include the programs and services that have been developed. The Special Inspection Registration Program, the Welder Certification Program, Code Official Apprenticeship Program, and the WABO Bookstore are nationally recognized and further the mission and provide the financial strength to accomplish the goals set forth.

WABO's use of technology provides services that help build a strong organization. the Chat Line, and the WABO website provide a foundation for communication and information sharing that assist the effectiveness of the members and customers.

WABO will continue to enjoy progressive leadership. Members continue to step forward to take on the leadership responsibility and build on the strong legacy

of WABO. These leadership roles together with the professional management services provided by Jenkins Management Solutions, are great assets to the successful accomplishments of the association.

Weaknesses

Every organization has weaknesses. Recognizing and turning them into strengths will help assure the success of WABO.

Geographic differences within the state have not yet been dealt with. These differences are real but to accommodate the needs of each area is a challenge that must be accepted.

The limited number of active members (and voting members) has been recognized as a weakness. Gaining a higher level of participation of existing members and reviewing the organizational structure should be set as a priority. The reasons behind this weakness may be insufficient outreach to jurisdictions, WABO not being relevant to small jurisdictions, jurisdictional workloads, lack of support by the jurisdictions, and code administration not being viewed as an essential service. The fact that there are only so many jurisdictions in the state has also been recognized as a limiting factor to membership size.

Dependence on a small number of people keeping things moving (the 80/20 rule).

Perception that WABO is a threat to other ICC chapters in the state and that there is a lack of involvement with other chapters in general.

No concrete plan to deal with the imminent retirement of experienced code officials.

Opportunities and Threats

Many influences outside the association affect our ability to fulfill the stated mission. Some can be viewed as threats if not addressed in a positive manner. The following issues are identified as potential opportunities and threats.

Opportunities

- Increased partnering including trade organizations, design community, etc.
- Expand leadership role
- Help develop new permitting tools
- Involvement with local ICC chapters
- Enhanced and expanded educational activities
- Expanded influence on electrical code
- Development of a security code
- Assist in privatization of services
- Work with coalition to improve communication and leverage influence on state and national issues
- WABO road show to help small jurisdictions
- Development of training to overcome code complexity, increase consistency, and outreach to stakeholders and improve public image

- Creation of tool kits for elected officials, Building Officials, and public
- Standardization and consistency.
- Mentoring program.
- Expanded certification program
- State required certification
- Technology
- Marketing
- Code Official Apprenticeship Program
- Building Official Certification Program
- Western Pacific League of Building Officials

Threats

- Outsourcing and privatization
- Diminishing budgets
- Increasing workloads
- Unfunded mandates
- Failure to mentor
- Fear of change and usurping of authority
- Straying off the path
- Litigation
- Technology
- Increasing code complexity
- Increased level of service expectation
- Stagnation

Prioritized Initiatives for 2015

1. Participation and Sustainability (Outreach Committee)
 - a. Our participation is KEY. Encourage active participation and represent those who can't be here.
 - i. Grow participation of building officials at member meetings, bring a guest meeting each year
 - b. Inventory of talents and skills, institutional knowledge... succession planning. Capture the WHY we did what we did in the minutes.
 - c. Inform jurisdictional leaders of the value of having their building department staff attend WABO functions and meetings
 - d. Finance (Finance Committee)
 - i. Develop a strategy for The WABO Bookstore. Service becoming hard to sustain.
 - ii. Assure the continuation of WABO with sustainable revenue stream (bookstore, certification programs, etc.)
2. Education (Education Committee)
 - a. Offer more educational opportunities on the east side of the state
 - b. Develop strong process for getting education out there
3. Expand involvement in Group A code development (TCD Committee)
4. Full implementation of our apprenticeship program (Government Relations)
5. State Issues/Influence (Government Relations)
 - a. Provide cities a stronger voice in the State electrical code
 - b. Supporting a transparent, sustainable way to adequately fund the State Building Code Council
 - c. Maintain or improve our influence with State Building Code Council
6. Prepare for regional emergency response use to leverage relationship building (Emergency Management Committee)
7. Strengthen relationships with fire marshals, BIAW, SEAW, AIA, etc., a holistic view, make a lasting partnership, issue papers, preparing cards (use these to promote) Outreach Committee, Board, Government Relations)
 - a. Need greater representation on ICC Board
8. Code (TCD Committee)
 - a. IPC alternative (and training)
 - b. Green code - determine where to go with this in Washington

WABO STRATEGIC PLAN

Outreach

- Elected Officials and General Public: Take a stronger role to increase awareness as to the important role the building department plays in supporting communities' safety, economic development and sustainability. Increase the effectiveness of our marketing.
- Increase participation from nonparticipating building officials, including mentoring, incentives, tool kits (including common forms and brochures) and education.
- Expand the role of the Accredited Code Official to include training, becoming mentors, and providing more of a leadership role to WABO members.
- Enhance relationships with other organizations with common interests such as trade organization, unions, state agencies such as Labor and Industries and Department of Health, fire service, schools (trade and university), home builders associations and schools from elementary to high school.
- Reach out to other ICC chapters.
- Strengthen professional image by educating the public on the importance of code officials and enforcing the code, which will also protect funding of building departments. Ways to accomplish this may include sending the WABO newsletter to local elected officials highlighting the value of the building official, promote individuals, profile the community, and encourage elected officials to attend WABO meetings. Also, consider sending out a monthly newsletter, rather than quarterly.

- Reach out to other groups such as high school and college students and veterans, through job fairs to encourage them to become code officials.
- Support legislation to require each jurisdiction to employ qualified building officials with phased-in implementation.

Technical Code Development

- Represent WABO in state and national code development activities and increase participation at code hearings.
- Continue to take a lead role in protecting the governmental consensus process related to code development conducted by the State Building Code Council and ICC.
- Serve as liaison between State Building Code Council Technical Advisory Groups and WABO membership.
- Promote code consistency and uniformity and encourage consistent application of codes.

Government Relations

- Work to expand influence and presence in legislative process by:
 - Identifying current and emerging issues for proactive participation.
 - Developing relevant working relationships with legislators and other associations.
 - Gaining the reputation for bringing solutions to difficult issues through the effective use of building official and lobbyist contact.
 - Developing yearly presentation for legislators on building code official perspectives including ideas and

innovations they would like to implement locally.

- Seek funding source to support education and training for code officials through a training trust account that can sustain training both for current code officials and the apprenticeship program.
- Support the use of green building technology.
- Seek to obtain counties authority to conduct electrical inspections.
- Support an effort to begin the dialogue with small business to determine if opportunities exist for removing barriers, both real and perceived, posed by construction codes.

Education

- Encourage use of technology by investigating available technology for communication processes.
- Explore teleconferencing for WABO meetings, ICC code hearings, ICC annual business meetings and instant messaging for committees through WABO.
- Encourage online permitting.
- Develop long-range education plans and calendar for members and stakeholders.
- Develop a higher education degree or certification program for code officials and building department staff.
- Explore state funding to support code education for the public.
- Provide training for building officials in areas outside their subject, such as land use concepts, design development processes, budgeting etc.

- Establish a list of core instructors and facilities in order to offer consistent quality training.
- Continue to strengthen the Annual Education Institute and training sessions and work towards expansion to eastern Washington.

Emergency Management

- Develop model building safety agency emergency response and devolution plans for use by member jurisdictions.
- Partner with local government entities to facilitate effective all-hazard emergency management throughout the four phases of emergency management (Planning, Mitigation, Response, Recovery).
- Support statewide hazard awareness and emergency preparedness education efforts.
- Collaborate on development of tools and systems for management of building safety resources in emergencies including credentialing of building safety responders and cataloguing of member talents and capabilities for quick access to resources during a response.
- Catalog member talents for a resource list.

Finance

- Maintain financial stability of Association in order to support critical member services.
- Develop an investment strategy to ensure the best return on WABO funds without undue risk.

Certification and Registration

- Continue and enhance the alliance with Oregon Building Officials Association

(OBOA) in order to strengthen Special Inspection programs.

- Explore certification for green building inspector program.

Accreditation

Code Official Accreditation Program (COAP)

- Review and refine Code Official Accreditation Program
- Gain committee participation from WABO jurisdictions
- Develop Tutor Program
- Obtain State Licensing
- Outreach Prospective Students
- Outreach Prospective Instructors and Tutors
- Increase Awareness to Members
- 12 Module Course Development

Accredited Code Official (ACO) Program

- Continue to review and maintain the written exam
- Develop and Maintain Program Administration
- Outreach to Membership

Executive Board

- Plan for changing economics affecting WABO membership and address issues such as what will WABO look like in the future? How do we ensure continued participation and growth in the Association?
- Continue to promote transparency in business practices by WABO.
- Provide advanced information on what will be addressed at WABO Quarterly Meetings.
- Foster imagination. Mini-brainstorming sessions at each meeting. (5 to 10 minutes each).
- Continue to work with Western Pacific League of Building Officials to work on common interstate issues
- Provide strong support for Code Official Apprenticeship Program.

JOIN US AT



Location: 24 Taps Burgers & Brews



Address: 825 W Riverside Ave, Spokane, WA 99201

Date: Thursday - October 27, 2022

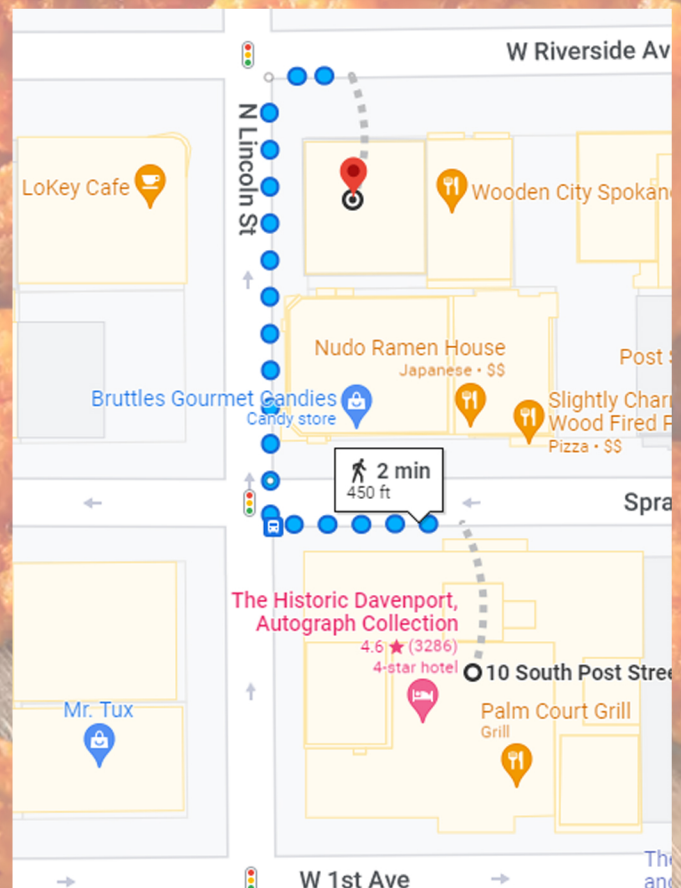
Time: 6:00 PM - 8:00 PM

**Each Person Will Receive 2
Drink Tickets**

(Good for Beer, Wine, or Soda)

**WABO Will Be Providing A
Variety of Appetizers**

**Dinner & Additional Beverage
Service Available (No-Host)**





PROFESSIONAL DEVELOPMENT
FALL BUSINESS MEETING 2022

WHO SAYS WHO STAMPS?

ICC PREFERRED PROVIDER COURSE #33861 (0.3 CEU)

The goal of this presentation is to provide a better basis for understanding the State of Washington's involvement in the licensing of Architects and Engineers as well as discussing the authority of local jurisdictions to require stamping from design professionals.





Published on *Washington State* (<https://www.atg.wa.gov>)

[Home](#) > Authority Of Engineer To Stamp And Sign Architectural Drawings For Submission For Building Permits

Attorney General Bob Ferguson

ARCHITECTS—ENGINEERS—Authority Of Engineer To Stamp And Sign Architectural Drawings For Submission For Building Permits

The stamping and submission of architectural drawings constitutes the practice of architecture, which with some exceptions requires registration with the Washington State Board of Architecture.

The legislature has amended RCW 18.08.410 to remove a formerly-applicable exception under which engineers could stamp architectural drawings. This legislative change revises the conclusion we reached in AGO 1990 No. 9, which we overrule to that limited extent.

March 31, 2021

The Honorable Amy Walen
State Representative, District 48
PO Box 40600
Olympia, WA 98504-0600

Cite As:
AGO 2021 No. 2

Dear Representative Walen:

By letter previously acknowledged, you have requested our opinion on the following question:

May an engineer stamp and sign architectural drawings for submission for building permits?

BRIEF ANSWER

No. Subject to certain exemptions, the stamping and submission of architectural drawings constitutes the practice of architecture that requires registration with the Washington State Board of Architecture. Prior to 2010, there was an exemption to allow engineers to stamp architectural drawings under certain circumstances. Those exemptions were removed in 2010 by Engrossed Substitute S.B. 5529, 61st Leg., Reg. Sess. (Wash. 2010). Thus, now the stamping of architectural drawings by a non-architect is in violation of the Architect's Act and would possibly constitute the unlicensed practice of architecture.

FACTUAL BACKGROUND

In order to receive a permit to build or change certain structures, the building owner is required to submit to local building officials architectural and engineering drawings that have been prepared and stamped by a licensed architect, professional engineer, or both. When and how those drawings are prepared, stamped, and submitted is governed by statute and local building codes.

[original page 2]

In 1990, this office issued a formal opinion on the issue of when and how a registered professional architect or professional engineer must sign and stamp a drawing being submitted for building permits. AGO 1990 No. 9. The Opinion correctly noted that the stamping and submission of architectural drawings constitutes the practice of architecture which requires registration as an architect. The Opinion also correctly noted that the law contained exemptions to that requirement. Some of those exemptions allowed engineers to stamp plans and design work created by non-architects. See Laws of 1985, ch. 37, § 12 (enacting RCW 18.08.410). However, in 2010, the legislature removed those exemptions. Laws of 2010, ch. 129, § 8 (amending RCW 18.08.410).

Based on your letter it appears that some building officials are still accepting architectural drawings prepared by non-professionals but stamped by engineers even when those drawings are primarily architectural in nature.[1] We also understand that these building officials are doing so in reliance on a 1990 Attorney General Opinion analyzing statutory exemptions to the laws that have since been removed.

ANALYSIS

The profession of architecture is governed by statute, and licenses to practice architecture are issued and regulated by the Washington State Board of Architects. See RCW 18.08. The scope of what constitutes the practice of architecture is defined by statute as

the rendering of any service or related work requiring architectural education, training, and experience, in connection with the art and science of building design for construction of any structure or grouping of structures and the use of space within and surrounding the structures or the design for construction of alterations or additions to the structures, including but not specifically limited to predesign services, schematic design, design development, preparation of construction contract documents, and administration of the construction contract.

RCW 18.08.320(12). Additionally, the laws require that architects sign and seal or stamp each page containing architectural drawings prepared or reviewed by the architect that are submitted in support of an application for a building permit. RCW 18.08.370(2); WAC 308-12-081(1).

It is unlawful to practice architecture without being registered or authorized to practice in the state of Washington. RCW 18.08.310. Engaging in the unlicensed practice of architecture can subject another licensed individual (such as a licensed engineer) to sanctions for unprofessional conduct, RCW 18.235.110, and can subject “any person” to sanctions after the issuance of a cease and desist order, RCW 18.235.150. It is also a misdemeanor to violate any of the provisions

[original page 3]

of RCW 18.08. RCW 18.08.460(1) (“Any person who violates any provision of this chapter or any rule promulgated under it is guilty of a misdemeanor and may also be subject to a civil penalty in an amount not to exceed one thousand dollars for each offense.”).

However, RCW 18.08.410 exempts certain activities from the scope of the practice of architecture. Some of those exemptions include design work for structures that will be used for residential buildings of up to four dwelling units, farm buildings, any structure smaller than four thousand square feet. RCW 18.08.410.[2]

At the time AGO 1990 No. 9 was issued, former RCW 18.08.410 also provided two additional exemptions that allowed engineers to stamp architectural drawings. Under that older version of the law the following activities were not prohibited:

(7) Design-build construction by registered general contractors if the structural design services are performed by a registered engineer;

[original page 4]

. . .

(9) Any person from designing buildings or doing other design work for structures larger than those exempted under subsections (5) and (6) of this section, if the plans, which may include such design work, are stamped by a registered engineer or architect.

Laws of 1985, ch. 37, § 12. However, in 2010, the legislature removed those exemptions and RCW 18.08.410 now reads as quoted in footnote 2.

Current law provides no other exemptions allowing engineers to stamp architectural drawings. See RCW 18.08; RCW 18.43. When statutory language is omitted from subsequent versions of the law, courts will assume that the law has changed. *Rhoad v. McLean Trucking Co.*, 102 Wn.2d 422, 427, 686 P.2d 483 (1984) (“We must assume . . . that the Legislature intended to exclude the term and that it meant what it said.” (alteration in original) (quoting *Caplan v. Sullivan*, 37 Wn. App. 289, 292, 679 P.2d 949 (1984))). Moreover, “[a] change in legislative intent is presumed when a material change is made in a statute.” *Darkenwald v. Emp. Sec. Dep’t*, 183 Wn.2d 237, 252, 350 P.3d 647 (2015) (alteration in original) (quoting *Davis v. Dep’t of Licensing*, 137 Wn.2d 957, 967, 977 P.2d 554 (1999)). Thus under current law, a registered engineer may not stamp architectural drawings for submission to building officials for permits and doing so would potentially constitute the unlicensed practice of architecture.

Finally, I note that this Opinion does not completely rescind and replace AGO 1990 No. 9. Rather, it specifically addresses the change in law in 2010 that removed the authority of engineers to stamp architectural drawings. We accordingly overrule AGO 1990 No. 9 only to that extent, but offer no opinion on the other issues in AGO 1990 No. 9. And, moreover, it likely bears repeating for those who rely on AG Opinions that although AG Opinions are afforded “great weight” by courts, *Freeman v. State*, 178 Wn.2d 387, 396, 309 P.3d 437 (2013), they are not controlling authority in those courts. And to the extent they are contradicted by subsequent changes to statutes, the language of the statute will always prevail. Thus, any reader of an AG Opinion would be wise to separately consult the relevant statutes for subsequent changes in the law and to consult an attorney when seeking legal advice.

We trust that the foregoing will be useful to you.

ROBERT W. FERGUSON
Attorney General

s/ R. July Simpson
R. JULY SIMPSON
Assistant Attorney General
(360) 586-3151

wro

[1] We have identified no statutes, rules, or policies that define when a drawing is primarily architectural or primarily engineering in nature. Rather, local building officials have the authority to determine when a project requires the analysis and drawings of an architect or an engineer and, pursuant to that decision, such drawings must be drafted and stamped by the appropriate professional. The project must then be completed according to those drawings.

[2] As of the date of this opinion, the entirety of RCW 18.08.410 provides:

This chapter shall not affect or prevent:

(1) The practice of naval architecture, landscape architecture as authorized in chapter 18.96 RCW, engineering as authorized in chapter 18.43 RCW, or the provision of space planning or interior design services not affecting public health or safety;

(2) Drafters, clerks, project managers, superintendents, and other employees of architects from acting under the instructions, control, or supervision of an architect;

(3) The construction, alteration, or supervision of construction of buildings or structures by contractors registered under chapter 18.27 RCW or superintendents employed by contractors or the preparation of shop drawings in connection therewith;

(4) Owners or contractors registered under chapter 18.27 RCW from engaging persons who are not architects to observe and supervise construction of a project;

(5) Any person from doing design work including preparing construction contract documents and administration of the construction contract for the erection, enlargement, repair, or alteration of a structure or any appurtenance to a structure regardless of size, if the structure is to be used for a residential building of up to and including four dwelling units or a farm building or is a structure used in connection with or auxiliary to such residential building or farm building such as a garage, barn, shed, or shelter for animals or machinery;

(6) Except as otherwise provided in this section, any person from doing design work including preparing construction contract documents and administering the contract for construction, erection, enlargement, alteration, or repairs of or to a building of any occupancy up to a total building size of four thousand square feet; or

(7) Any person from doing design work, including preparing construction contract documents and administration of the contract, for alteration of or repairs to a building where the project size is not more than four thousand square feet in a building greater than four thousand square feet and when the work contemplated by the design does not affect the life safety or structural systems of the building. The combined square footage of simultaneous projects allowed under this subsection (7) may not exceed four thousand square feet.



Published on *Washington State* (<https://www.atg.wa.gov>)

[Home](#) > Authority Of Engineers And Architects To Stamp And Sign Drawings For Submission For Building Permits

Attorney General Bob Ferguson

ARCHITECTS—ENGINEERS—Authority Of Engineers And Architects To Stamp And Sign Drawings For Submission For Building Permits

Washington law provides no bright line rule for distinguishing between design documents that must be completed by an architect and those that must be completed by an engineer. In general, design work falls within an engineer's scope of practice when it requires "engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences," and design work falls within an architect's scope of practice when it requires "architectural education, training, and experience, in connection with the art and science of building design[.]" It is primarily up to local building officials to determine which types of documents are required or sufficient as part of the local jurisdiction's building permit processes.

If design work falls within an engineer's scope of practice, such work does not require an exemption from the practice of architecture to be lawful, even if the work would simultaneously fall within an architect's scope of practice.

May 24, 2022

The Honorable Jim Honeyford
State Senator, District 15
PO Box 40415
Olympia, WA 98504-0415

Cite As:
AGO 2022 No. 3

Dear Senator Honeyford:

By letter previously acknowledged, you have requested our opinion to further clarify when design documents submitted to local building officials may be stamped by engineers as opposed to when they must be stamped by architects. We paraphrase your questions and answer them as follows:

QUESTIONS PRESENTED AND BRIEF ANSWERS

1. When does a complete set of design documents created by an engineer for a non-agricultural and non-residential building that exceeds four thousand square feet amount to the practice of engineering as authorized by RCW 18.43?

There is no bright line rule in Washington law for when design documents are engineering or architectural in nature—both professions may engage in building design as part of their scope of

practice. Design work completed by an engineer falls within an engineer's scope of practice when it requires "engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences[.]" RCW 18.43.020(8)(a). In contrast, design work falls within an architect's scope of practice when it requires "architectural

[original page 2]

education, training, and experience, in connection with the art and science of building design[.]" RCW 18.08.320(12). These two definitions have the potential for substantial overlap, as both contemplate building design. It is primarily up to the local building officials to determine which types of documents are acceptable for any given project on a case by case basis.

2. If a complete set of design documents is considered the practice of engineering as authorized by RCW 18.43, would those documents fall under the exemption to architectural licensing provided in RCW 18.08.410(1)?

Engineers do not require an exemption from the practice of architecture to practice their profession. RCW 18.08.410(1) states that RCW 18.08, the chapter regulating the practice of architecture, "shall not affect or prevent" the practice of engineering. Thus design documents completed within the scope of an engineer's practice do not need to fall under an exemption to the practice of architecture to be lawfully submitted by an engineer.

FACTUAL BACKGROUND

To promote the health, safety, and welfare of building occupants or users, Washington has adopted a state building code that sets minimum requirements and standards for construction. RCW 19.27.020. As its building code, Washington has adopted the International Building Code and International Residential Code, both published by the International Code Council, Inc. RCW 19.27.031(1) (adopting codes); WAC 51-50 (adoption and amendment of the International Building Code); WAC 51-51 (adoption and amendment of International Residential Code). Cities and counties have the authority to amend the state building code within their jurisdiction so long as they do not diminish the code's minimum performance standards. RCW 19.27.040. The State Building Code Council regularly reviews the state building codes and adopts amendments as appropriate. RCW 19.27.074(1); see WAC Title 51. The Council also approves or denies city and county amendments when the local amendments apply to single-family or multifamily residential buildings. RCW 19.27.074(1)(b).

In order to receive a permit to build or change certain structures, a building owner may be required to submit to local building officials drawings that have been prepared and stamped by either a licensed architect, professional engineer, or both. See, e.g., *Residential Garage: Document Submittal Requirements* (Kent, WA effective Feb. 2, 2021), <https://www.kentwa.gov/home/showpublisheddocument/16969/637829310448270000> (specifying documental submittal requirements and minimum requirements for drawings and plans for construction of residential garage). See generally RCW 19.27.095(2) ("The requirements for a fully completed [building permit] application shall be defined by local ordinance[.]"); WAC 51-05-200 ("Building permit shall mean a permit issued by a city or a county to construct, enlarge, alter, repair, move, demolish, or change the occupancy of any building or structure regulated by the International Building Code . . . or by the International Residential Code[.]"). When and how those drawings are prepared, stamped, and submitted is governed by statute and local building codes, but the law is less clear about when a building project will require either engineering or architectural drawings.

[original page 3]

In 1990, this office issued a formal opinion on the issue of when and how a registered professional architect or professional engineer must sign and stamp a drawing being submitted for

building permits. AGO 1990 No. 9. The Opinion correctly noted that the stamping and submission of architectural drawings constitutes the practice of architecture which requires registration as an architect, but cited exemptions that allowed engineers to stamp plans and design work created by non-architects. AGO 1990 No. 9. The legislature removed those exemptions in 2010. Laws of 2010, ch. 129, § 8 (amending RCW 18.08.410).

In early 2021, citing ongoing confusion on the matter, Representative Walen requested an opinion about whether engineers may continue to stamp plans submitted to local building officials. In response, this office issued another formal opinion, AGO 2021 No. 2. That Opinion reiterated that the stamping of *architectural* drawings by non-architects is a violation of the Architect's Act and possibly the unlicensed practice of architecture. We clarified that to the extent AGO 1990 No. 9 conflicted with current law, building officials may not rely on AGO 1990 No. 9. AGO 2021 No. 2. But our 2021 Opinion did not opine on when drawings are architectural or engineering in nature. Nor did it preclude an engineer from stamping design documents that fall within an engineer's scope of practice.

Based on your letter, we understand that concerns continue to be raised over when design work constitutes the practice of engineering and when design work constitutes the practice of architecture, and you are seeking clarification.

ANALYSIS

The scope of practice of engineering and architecture are related yet independent from one another. As the prior opinions and your current request suggest, it is difficult to draw a bright line rule that delineates when design documents created and stamped by an engineer are sufficient, or when a project requires design documents created and stamped by an architect, and vice versa. The best we can say based on the statutes is that engineers may design when that work requires "engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences[.]" RCW 18.43.020(8)(a). Likewise, architects may stamp design documents that require "architectural education, training, and experience, in connection with the art and science of building design[.]" RCW 18.08.320(12). As explained below, we continue to take the position this issue is highly fact-specific and not amenable to a bright line rule.

A. Who may Create and Stamp Designs is Fact-Specific and Subject to Local Building Codes

Your first question seeks a clear delineation between design work falling within an architect's scope of practice and design work falling within an engineer's scope of practice. The statutes, however, do not provide us with any such bright line. Instead, they suggest that there may be some overlap between design work completed by the two professions, dependent on whether the design work falls within the education, training, and experience of either or both

[original page 4]

professions. Additionally, as mentioned above, local building codes may further define the nature of design work required for any given project. Thus, a determination of whether any design document falls within the scope of practice of an architect, engineer, or both will be highly-fact specific.

Each of the statutes defining the scope of practice for architecture and for engineering contemplate that the respective practice includes building design work. The scope of the practice of architecture is defined by statute as:

[T]he rendering of any service or related work requiring architectural education, training, and experience, *in connection with the art and science of building design* for construction of any

structure or grouping of structures and the use of space within and surrounding the structures *or the design for construction of alterations or additions to the structures*, including but not specifically limited to predesign services, schematic design, design development, preparation of construction contract documents, and administration of the construction contract.

RCW 18.08.320(12) (emphases added).^[1] Architects seal and sign (stamp) documents pursuant to RCW 18.08.370(3). Pertinent here, RCW 18.08.410(1) states that the scope of the practice of architecture does not affect or prevent the practice of engineering as authorized by RCW 18.43.

RCW 18.43.020 defines the practice of engineering as:

[A]ny professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences to such professional services or creative work as consultation, investigation, evaluation, planning, *design, and supervision of construction for the purpose of assuring compliance with specifications and design*, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects.

RCW 18.43.020(8)(a) (emphasis added). Engineers stamp design documents pursuant to RCW 18.43.070. *See also* WAC 196-23-020 (setting forth requirements for stamp usage on plan sets submitted by engineers). Thus, both of the statutes governing the scope of practice for architecture and engineering contemplate signed and stamped design work. RCW 18.08.320(12); RCW 18.43.020(8)(a).

[original page 5]

We are aware of two statutes that specifically require the design work of an engineer. See RCW 18.43.040(1)(a)(iv); RCW 18.43.020(12). Those statutes clarify that designs of significant structures, which include essential facilities, e.g., hospitals, fire and police stations, water tanks, or aviation control towers, must be performed by structural engineers. Otherwise, there is no bright line rule in statute, case law, or administrative rule generally governing when design work is architectural or engineering in nature.

The primary statutory difference appears to lie in whether the work requires the education of an engineer or that of an architect. Engineers may design when that work “require[s] engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences[.]” RCW 18.43.020(8)(a). An architect may design as a part of “any service or related work requiring architectural education, training, and experience, in connection with the art and science of building design[.]” RCW 18.08.320(12). Thus both engineers and architects create, stamp, and submit design documents for submission to planning offices. Whether a project will require design documents stamped by an architect, engineer, or both will be very fact-specific based on the needs of the project.

The legislature has determined that local building officials have the authority to determine what documents must be submitted for approval according to local building codes. RCW 19.27.095(2) (requirements for fully completed application defined by local ordinance). Local building codes vary from jurisdiction to jurisdiction across the state and we assume that each local jurisdiction has enacted codes responsive to local needs and concerns. Thus, local building officials will be in the best position to evaluate whether design documents submitted in conjunction with a specific project meet building code requirements.

This conclusion is supported by the comment provided by members of the Washington State Board of Registration of Professional Engineers and Land Surveyors (BRPELS) and the Washington State Board of Architects, who put together a joint working group to discuss this opinion request. The overall conclusion of that working group, and the subsequently submitted comment, is

that there is no bright line rule because each project has specific needs and requirements; thus the local permitting office is in the best position to understand each project and make a determination of whether a project will require architectural or engineering designs (or both).

B. The Practice of Engineering Does Not Require an Exemption from the Practice of Architecture to be Lawful

Turning to your second question, you ask whether design documents that are considered the practice of engineering under RCW 18.43 would fall under an exemption to architectural licensing. The answer is “no” because engineers do not require an exemption to practice engineering: RCW 18.08.410(1) provides that RCW 18.08, governing architects, “shall not affect or prevent . . . engineering as authorized in chapter 18.43 RCW[.]” Thus, nothing in the law governing architects impedes an engineer from practicing their own profession.

[original page 6]

This conclusion is also supported by the comment submitted by the working group of members from BRPELS and the Washington State Board of Architects. That comment affirms that when an engineer submits design documents, they do so under the authority of RCW 18.43.

CONCLUSION

In conclusion, there may be differences in projects that might require either architectural or engineering design work or both, but these differences are not easy or practical to define in a general sense. Absent more specific statutes, local planning offices are in the best position to make these determinations based on local building codes and the specifications of each project.

We trust that the foregoing will be useful to you.

ROBERT W. FERGUSON
Attorney General

s/ R. July Simpson
R. JULY SIMPSON
Assistant Attorney General
(360) 586-3151

wro

[1] RCW 18.08.410 states that the scope of the practice of architecture does not affect or prevent all design related activities. Design related activities that are not defined as the practice of architecture include: design work for residential buildings with four or fewer dwelling units, design work for farm buildings, design work for buildings not exceeding four thousand square feet, and interior design services not affecting public health or safety. RCW 18.08.410(1), (5), (6), (7). You ask specifically about design related activity that would not fall within the exemptions in RCW 18.08.410(6), so I discuss these exemptions no further.