

Integrated SEM

IEPEC

08/21/2019



Stillwater
ENERGY

Agenda

- Why Integrated SEM?
- How utilities are leveraging/integrating SEM
- Challenges to scaling SEM
- North American SEM Collaborative – Call to Action



Why Integrated SEM?

Informing Innovation

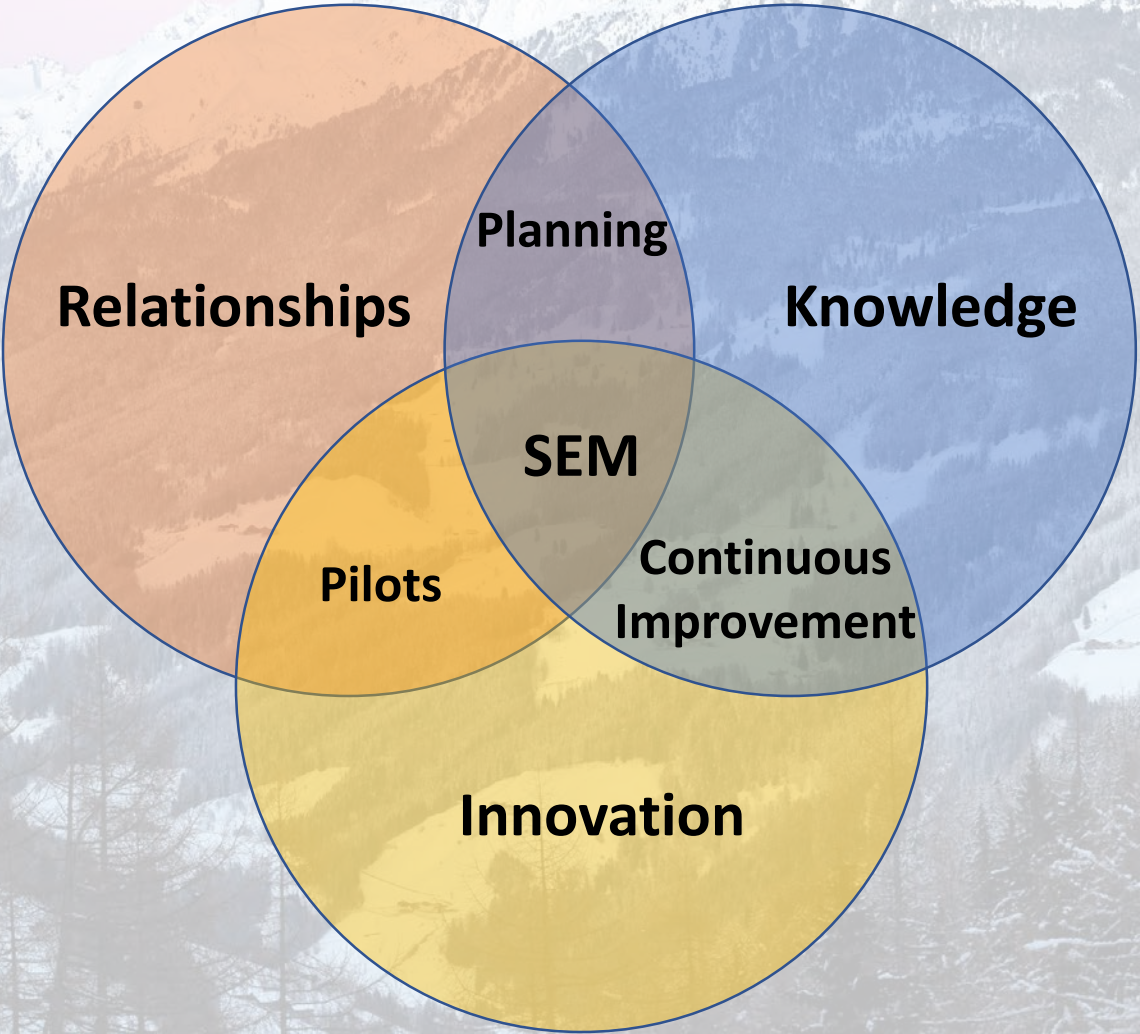
Research and Evaluation in a Changing Energy Landscape, we hoped to acknowledge the dramatic shifts occurring in our industry. The urgency of decarbonization, the increasing focus on distributed energy resources, and other developments requires us to reexamine our existing methods, apply them in new ways, and develop fresh approaches to evaluate the energy programs of tomorrow.

Thriving in an Uncertain Future

- Complex problem solving
- Critical thinking
- Creativity
- Diversity of perspectives
- Empathy

- Relationships
- Knowledge
- Innovation

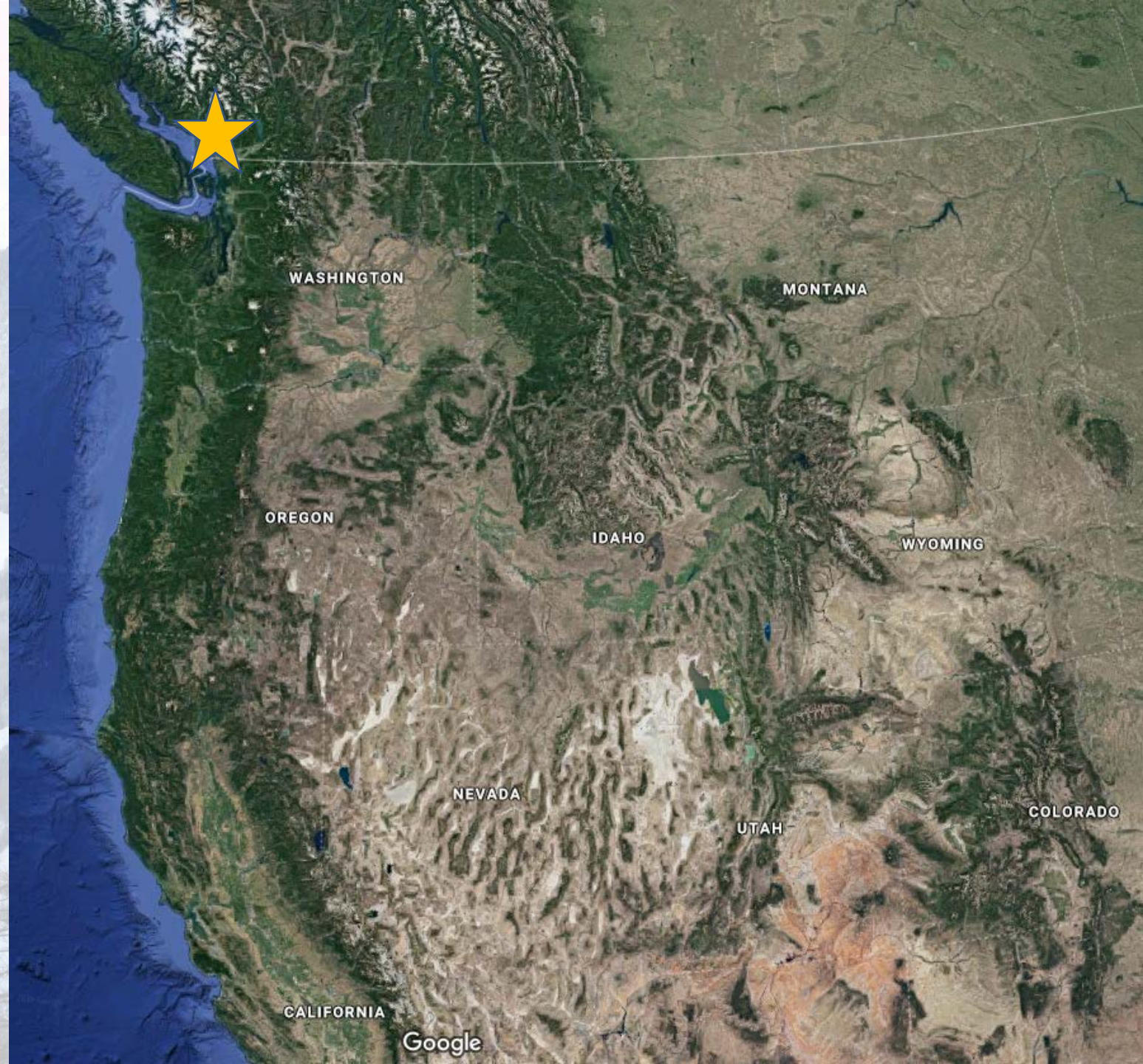
SEM as the Foundation



How utilities are leveraging/integrating SEM

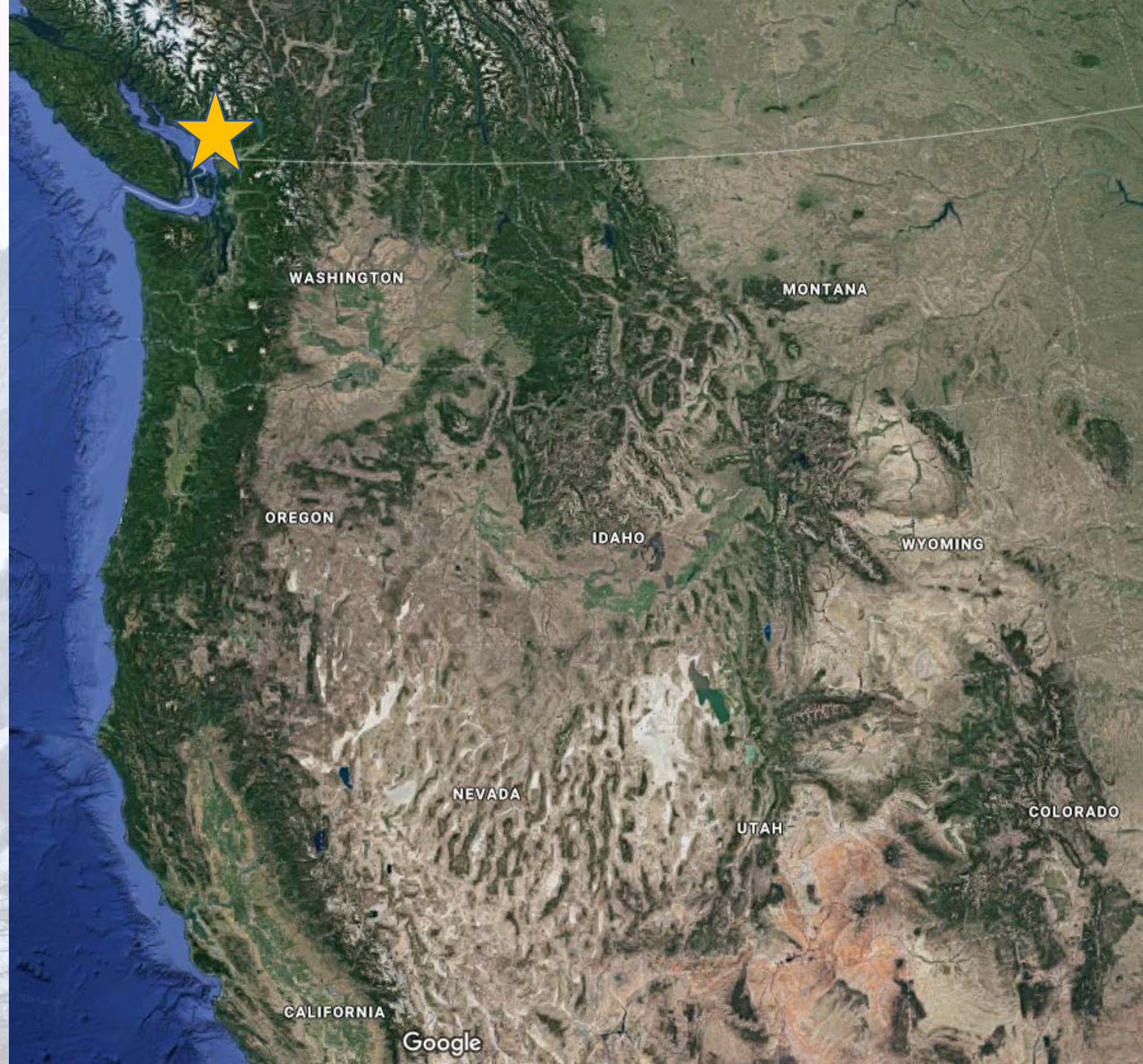
BC Hydro

- EE programs require SEM
- SEM Plan
- Performance contract
 - Quarterly reporting
 - Behavioral targets
 - Technical targets



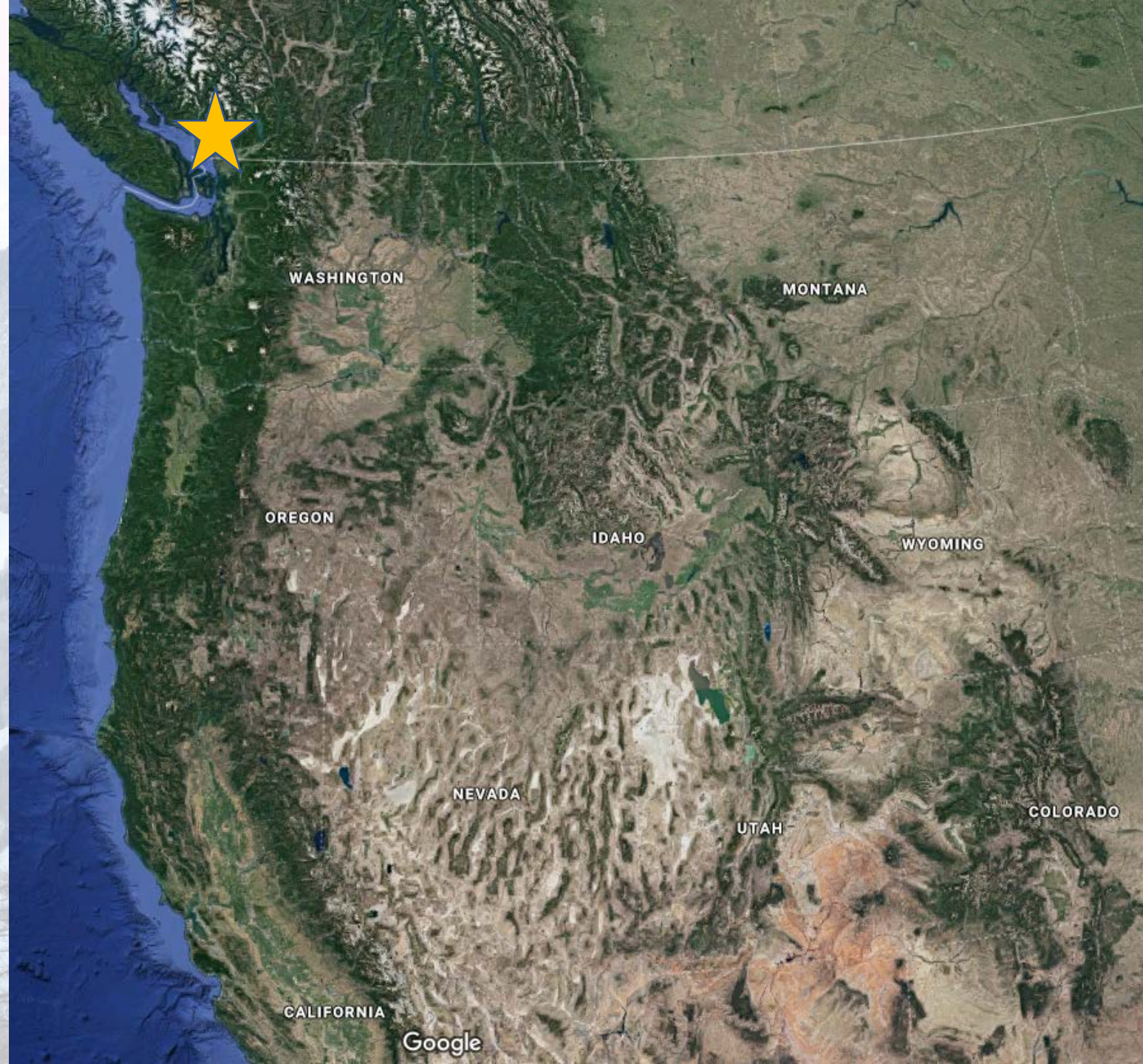
Relationships

- Points of contact
 - Energy Managers
 - Account Managers
- Access to executives
- Community of Practice
 - Biannual Roundtables
 - Biannual Roundups



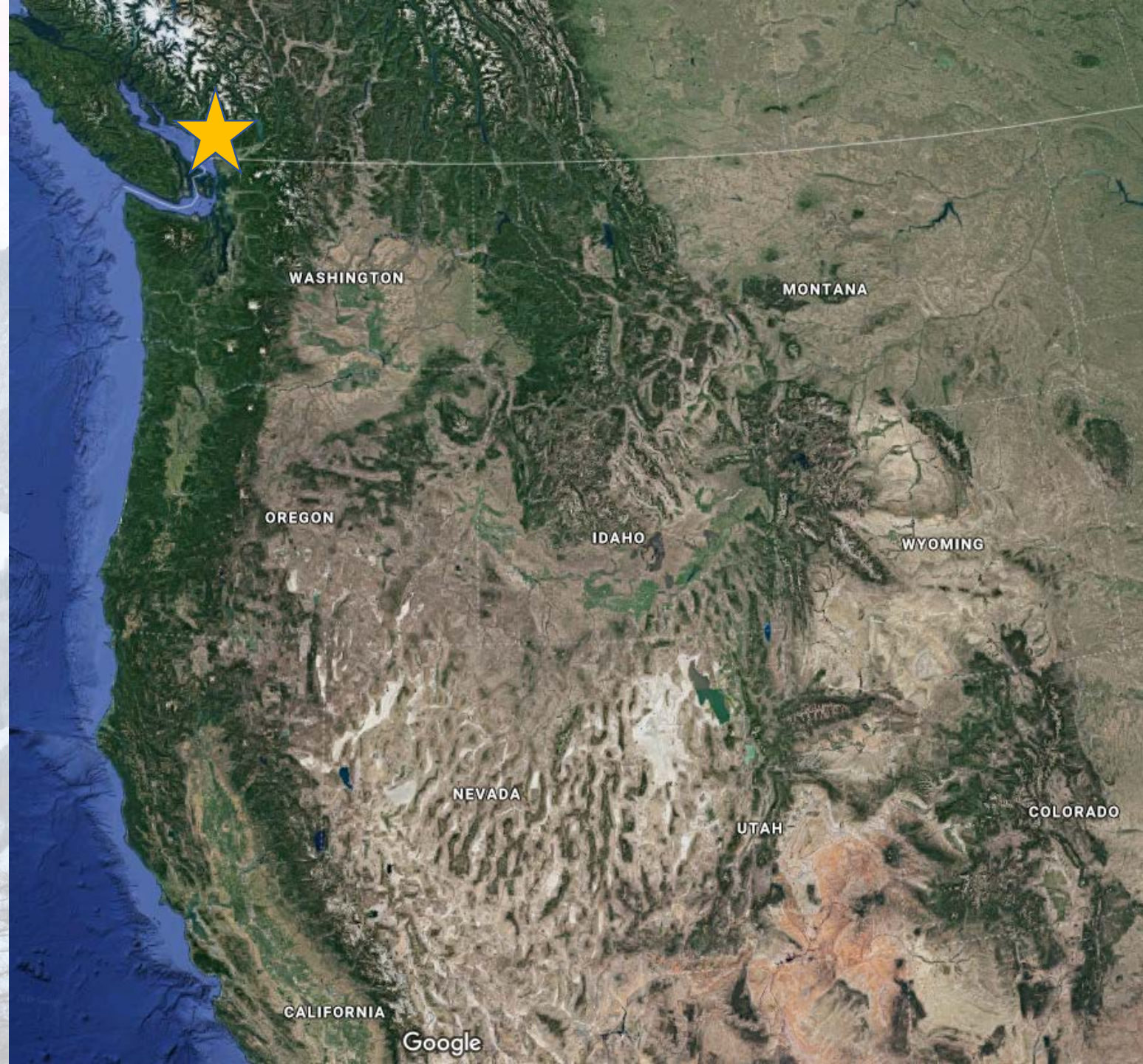
Knowledge

- SEM Plan
 - Business structure
 - Budgeting process/limits
 - Industry trends
 - Energy management mandate
 - SEM Action Plan
 - Employee awareness plan
 - Project list
 - Energy performance
- Community of Practice
 - Biannual Roundtables
 - Biannual Roundups
- Training



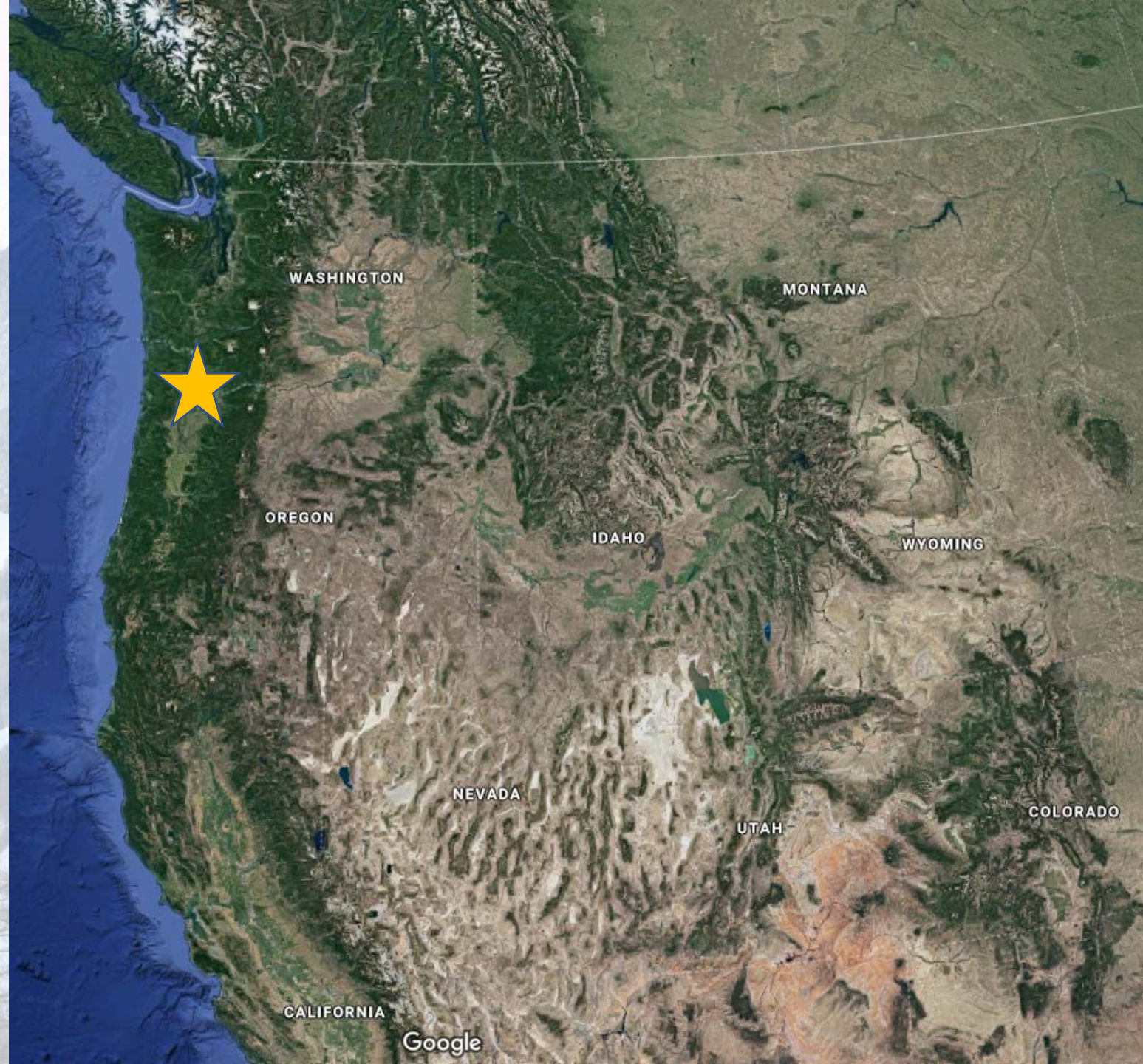
Innovation

- Demand response pilot
- Targeted DSM pilot
- Low carbon electrification
- New technology
- UBC – Industry Partnership



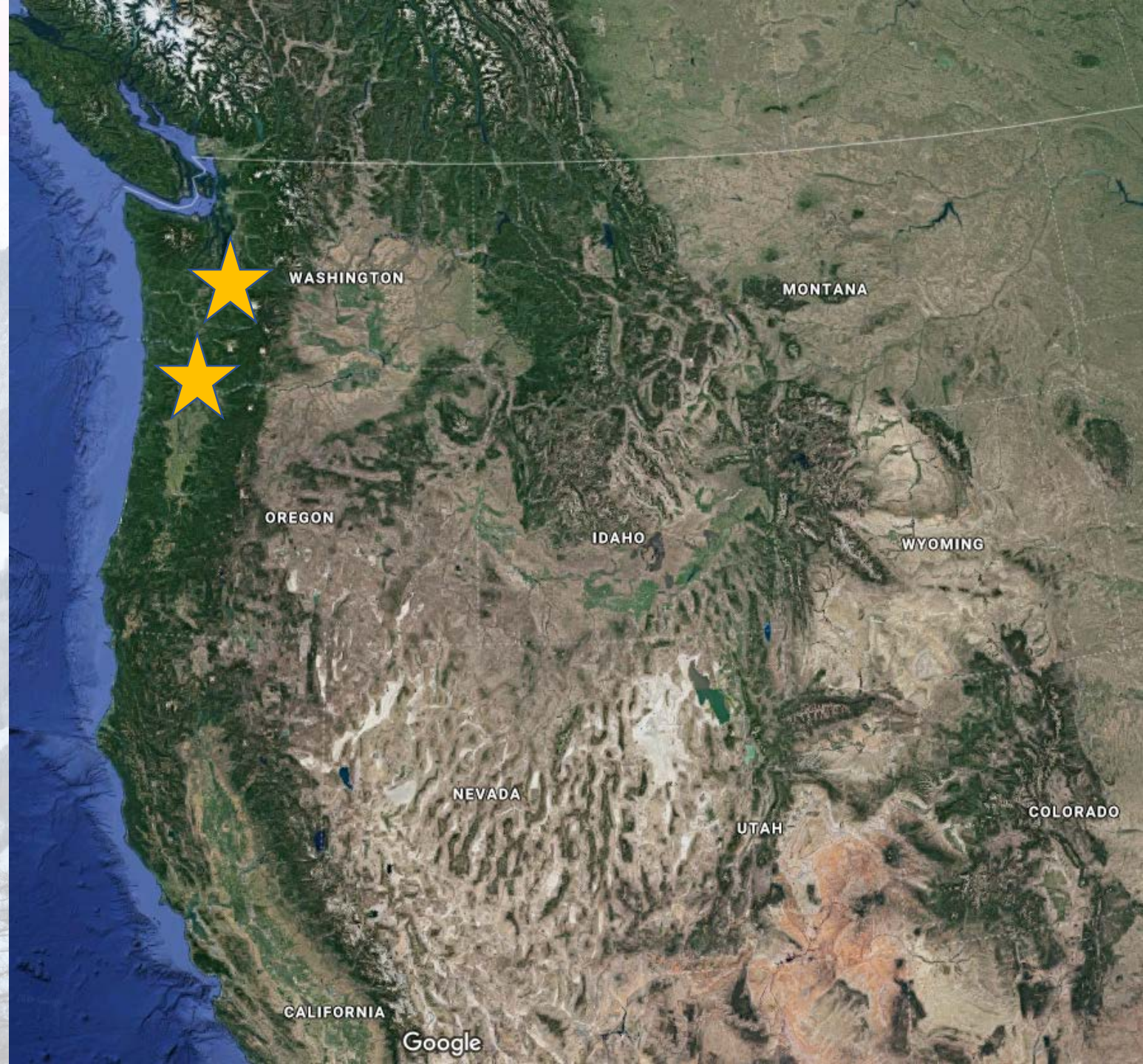
Energy Trust of Oregon

- Longstanding SEM programs
- Continuous SEM
- Long term account management strategy
- Professional development
- SEM in rural areas
- Incentives for interns
- Multifamily SEM
- Enhanced data collection
- NA SEM Collaborative



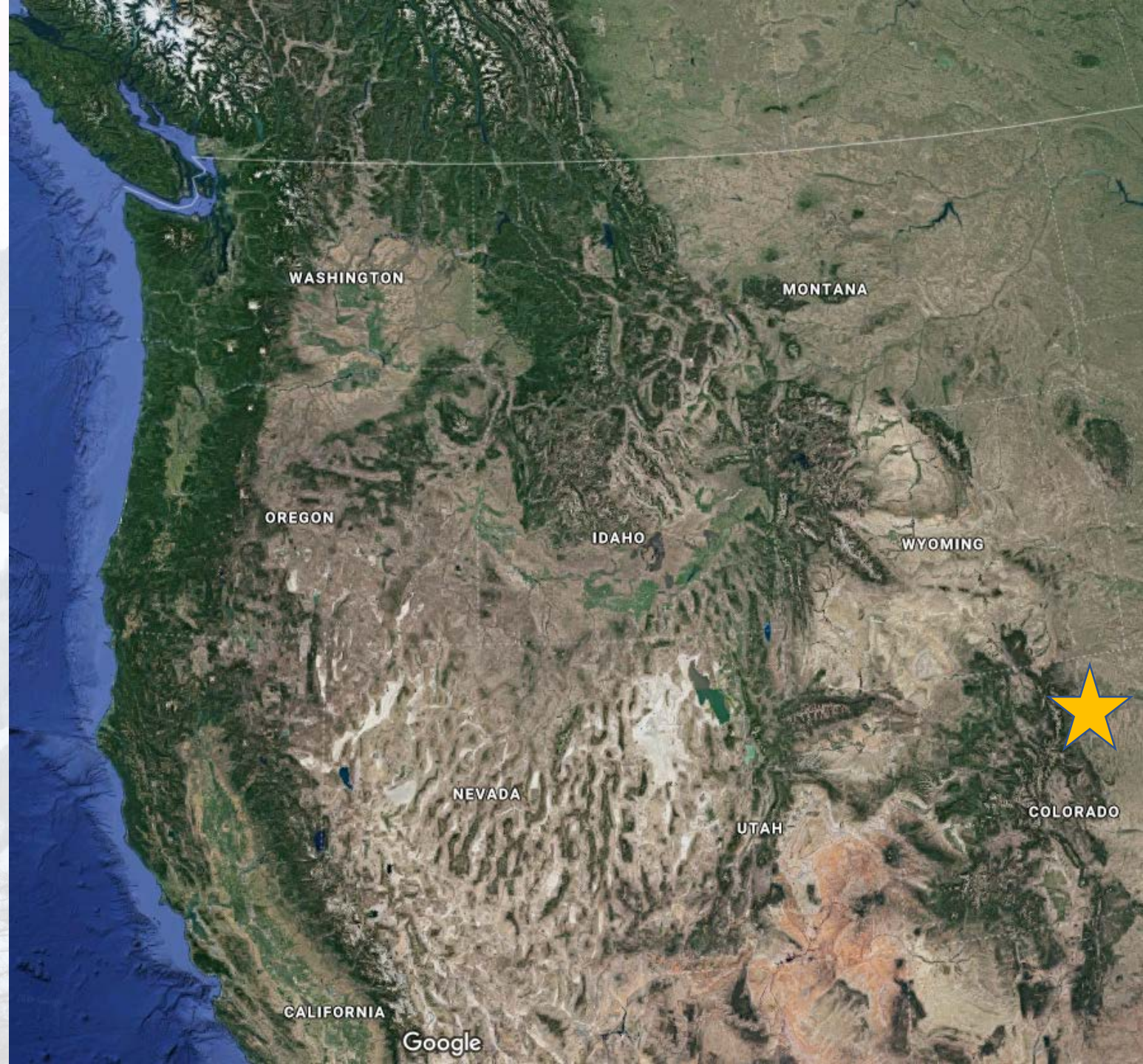
Tacoma Power & Clark Public Utilities

- Industrial SEM success
- Commercial SEM pilots
- Customer service
- Account management
- Customer engagement
- Considering
 - Customized energy Mgmt.
 - Streamlined M&V
 - Targeted DSM



Xcel Energy

- Relationship with the customer is most important.
- Building a future to influence customers.
- Continuously improving the customer's continuous improvement.
- SEM is the vehicle to drive coincident peak reductions.



Challenges to scaling SEM

Challenges to scaling SEM

- Clarity around stated objectives of SEM programs.
- Evaluation approaches should address stated objectives of SEM programs.
- How to validate the savings – site level versus Program?
- Cost effectiveness concerns
 - How to determine measure life for SEM?
 - How to assess costs of SEM?
- How to scale to smaller sites?

North American SEM Collaborative

- The SEM Collaborative will establish a community of practice by carrying out the following activities:
 - Holding training and networking events
 - Creating and disseminating informational materials on best practices
 - Providing online educational resources
 - Convening working groups to share best practices and insights on priority topics
 - Conducting research and publishing the findings in white papers and reports

NASEMC - Call to Action

Draft Research Plan for the Persistence and Cost Effectiveness of Strategic Energy Management (SEM) Programs

- The SEM community needs you
- Utilities need you
- The children need you

Bonus – Call to Action

SEM Program Measure Life Info

Name	Measure Life	Start / End Yrs	Basis for EUL	Website reference
BPA - HPEM	variable	2009-2015	Evaluation	BPA manual
BPA- SEM	1	2015-ongoing	Evaluation	BPA manual
BC Hydro - SEM	5	2016- ongoing	Research study	Publication





Thank you

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