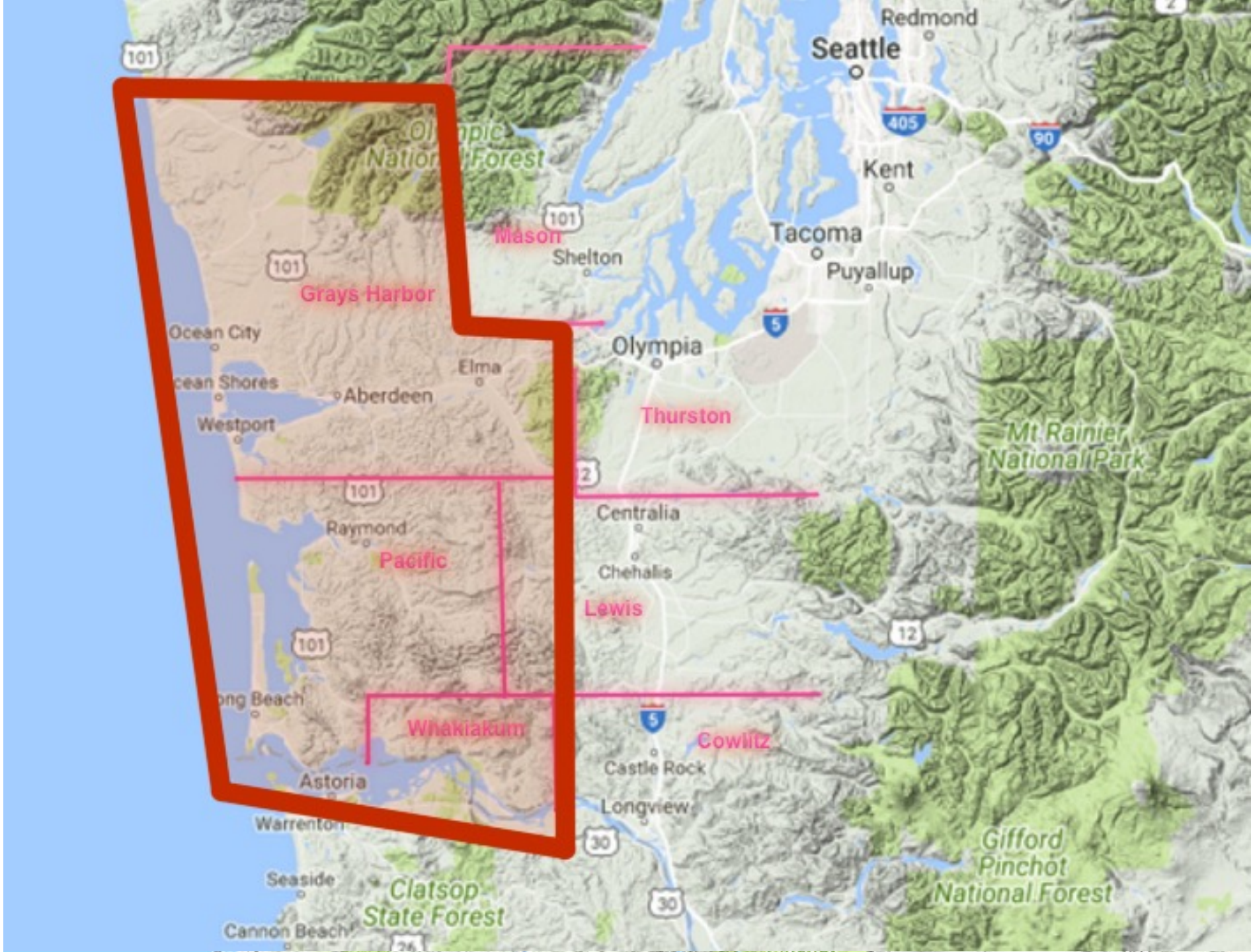
BeachNet

Covering the “Lower Left Corner”
of Washington State

QSL.net/nm7r

Welcome to the "Lower Left Corner" of Washington State



The "Lower Left Corner"

- Rural and sparsely populated.
- Coast Range, hills, ridges and isolated valleys.
- Transportation is two-lane roads.
- Communications cables follow the roads.

Why Amateur Radio?

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  - Trained through regular drills
- Able to quickly report local conditions over a wide area
  - Reports shape EOC response
  - Link EOC to neighborhoods, other counties & State

Why a repeater?

- **Extends range of low-power VHF/UHF equipment.**
  - **Line-of-sight propagation**
  - **Blocked by “dirt” / Absorbed by foliage**

- **If you can work a repeater**
  - **Can reach anyone else on that repeater**

Why a repeater network?

- **Any repeater has “holes” or “dead spots” in its coverage.**
  - **Multiple linked repeaters make full coverage more likely.**

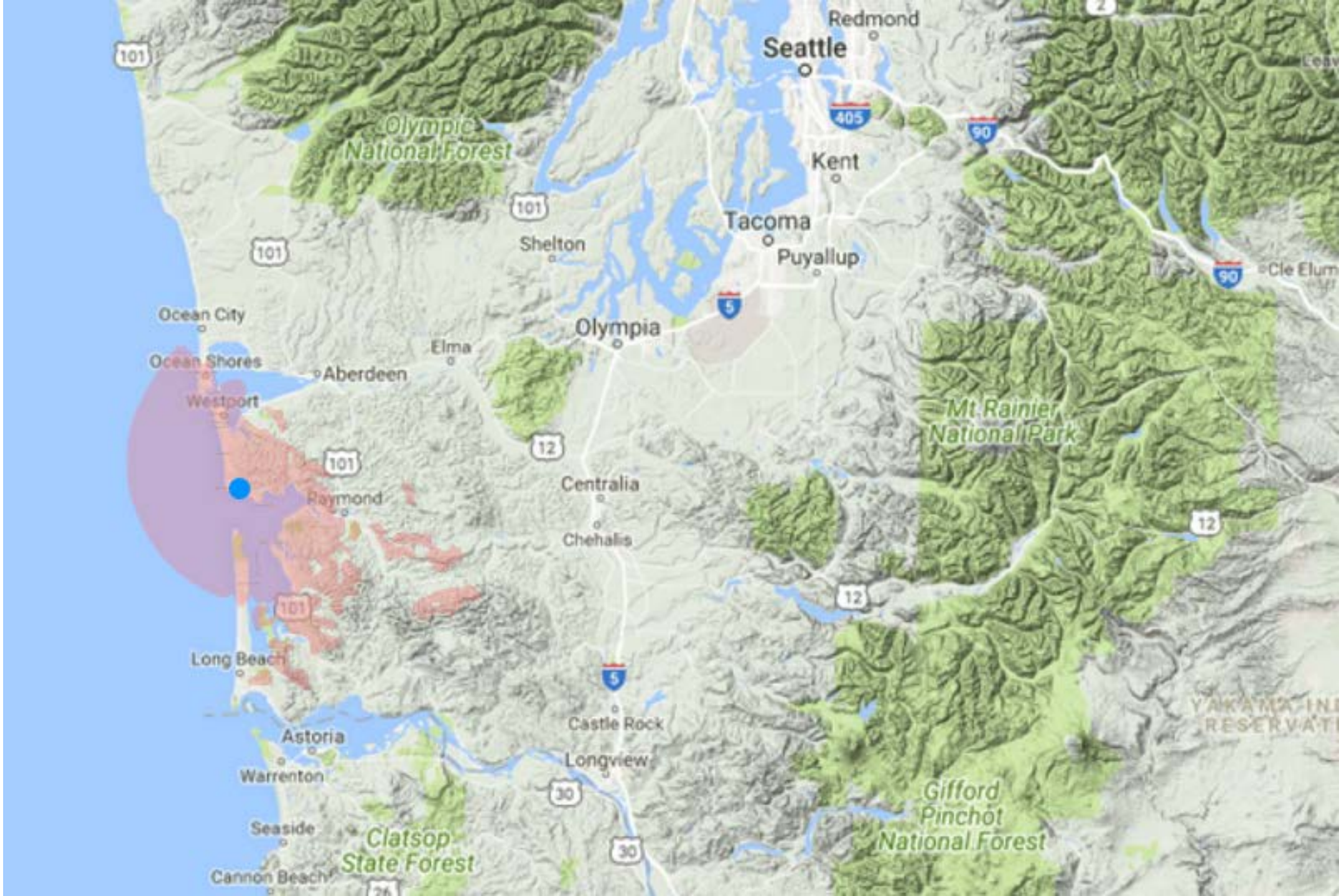
- **Reliability in case of equipment failure.**

Three Goals for *BeachNet*

1. Link two Pacific County EOCs
2. Link County EOC to State (Camp Murray)
3. Provide County-wide Coverage

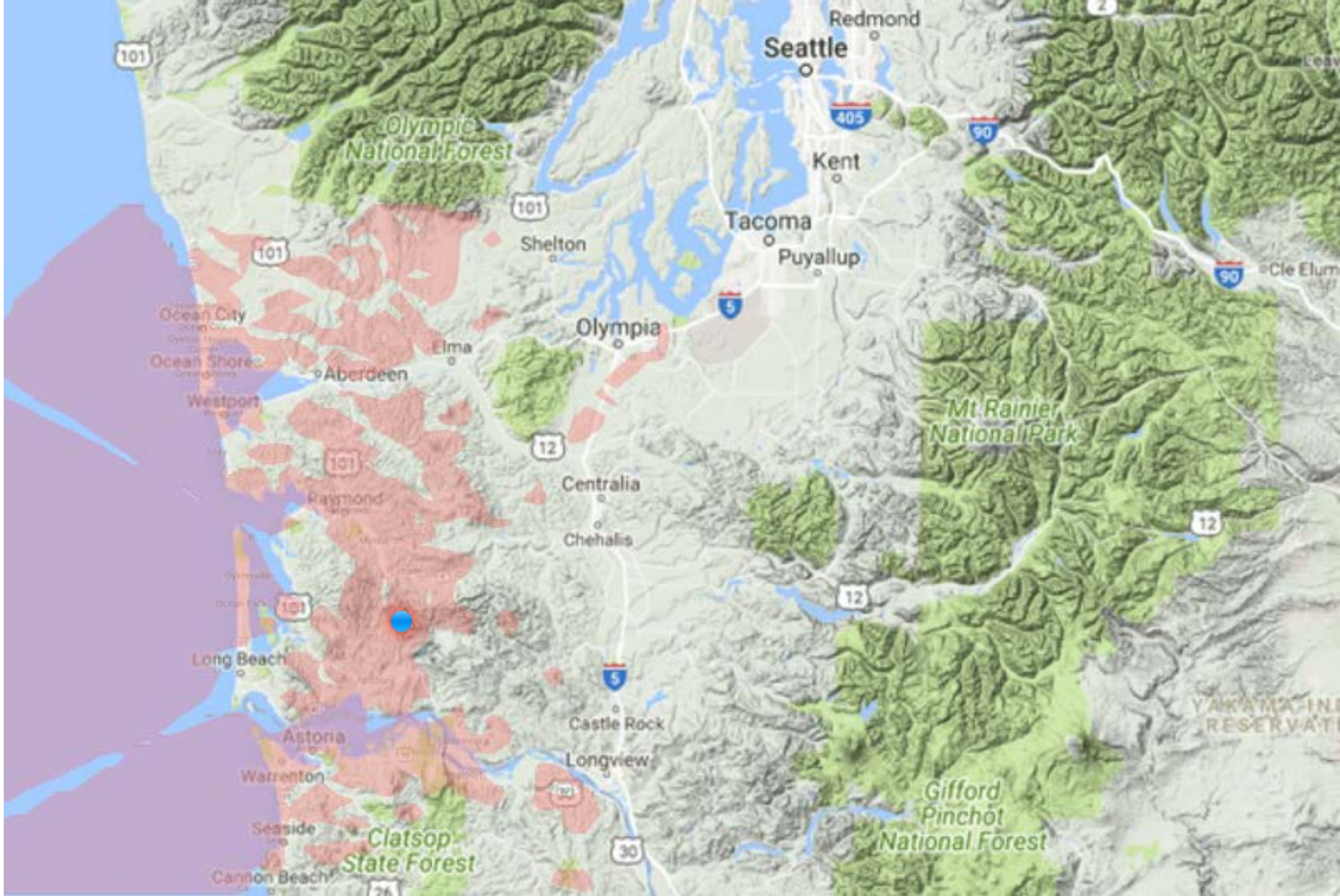
1998

North Cove VHF



2000

KO Peak UHF



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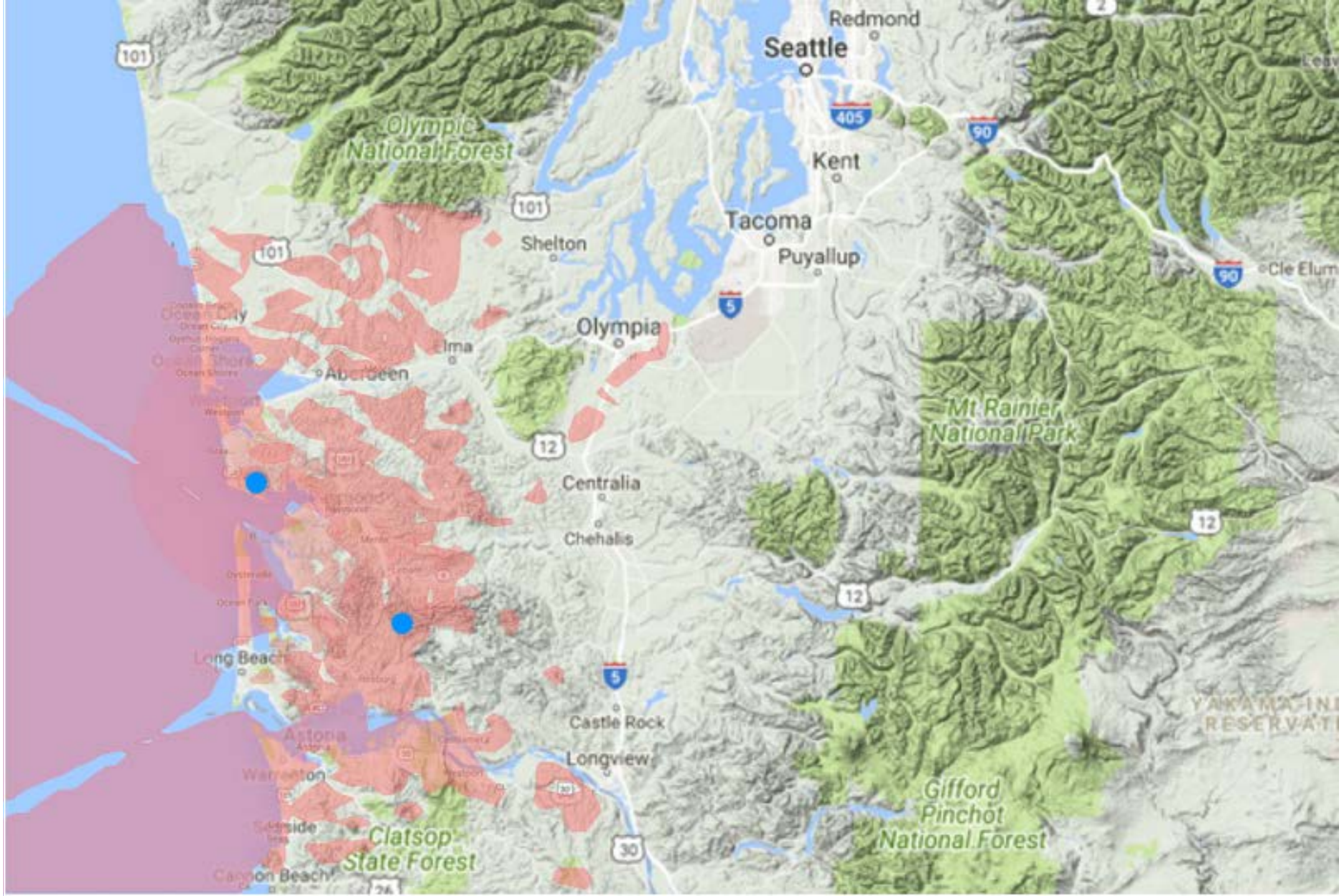

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1. Y2K Planning Session
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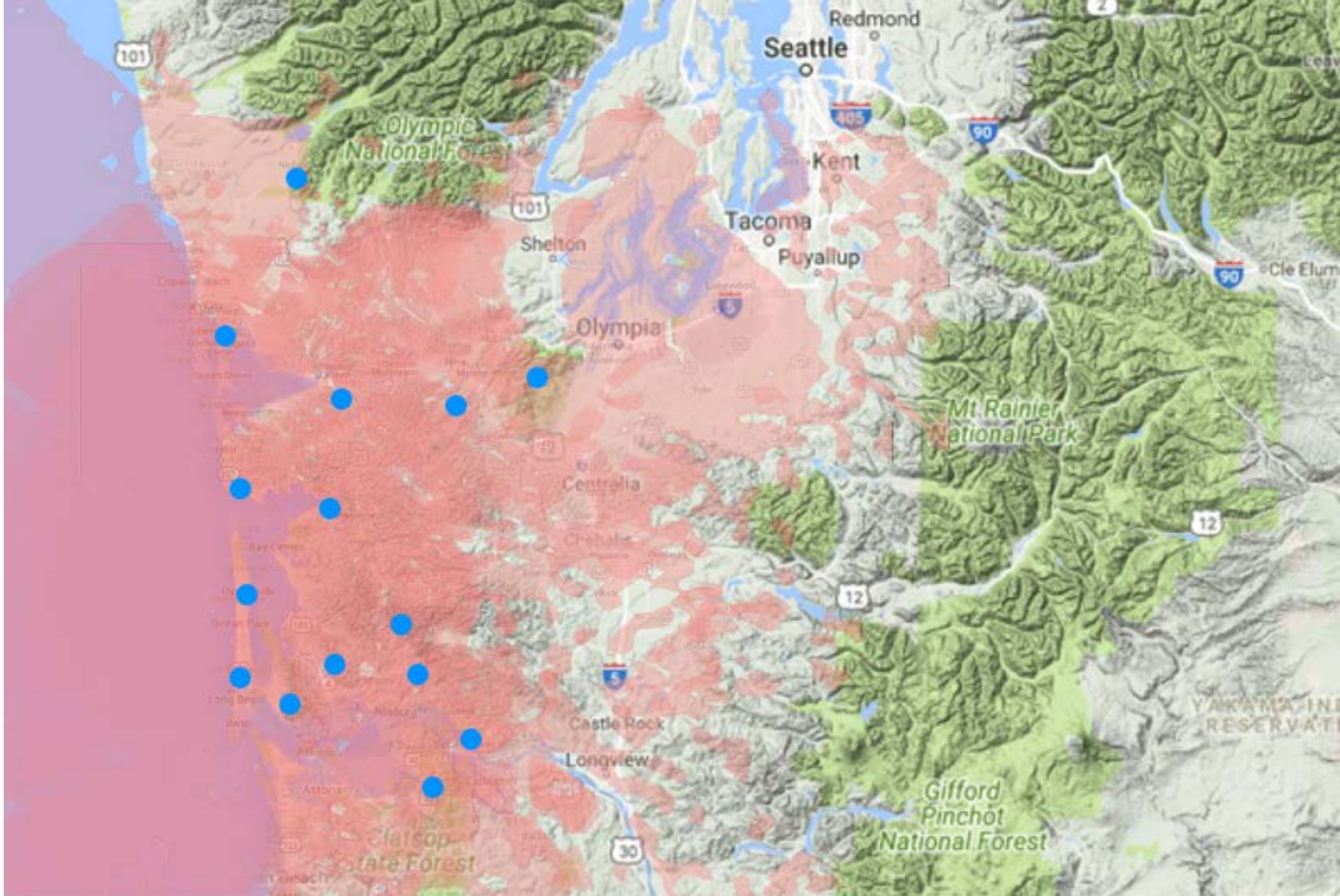
2. 2001 Nisqually Earthquake
    - Showcased Ham EmComm capabilities
3. FCC Narrow-banding Mandate
    - Provided equipment

Normal Operation with 18 of the 20 repeaters at 15 sites linked, providing near-complete regional coverage



Linking

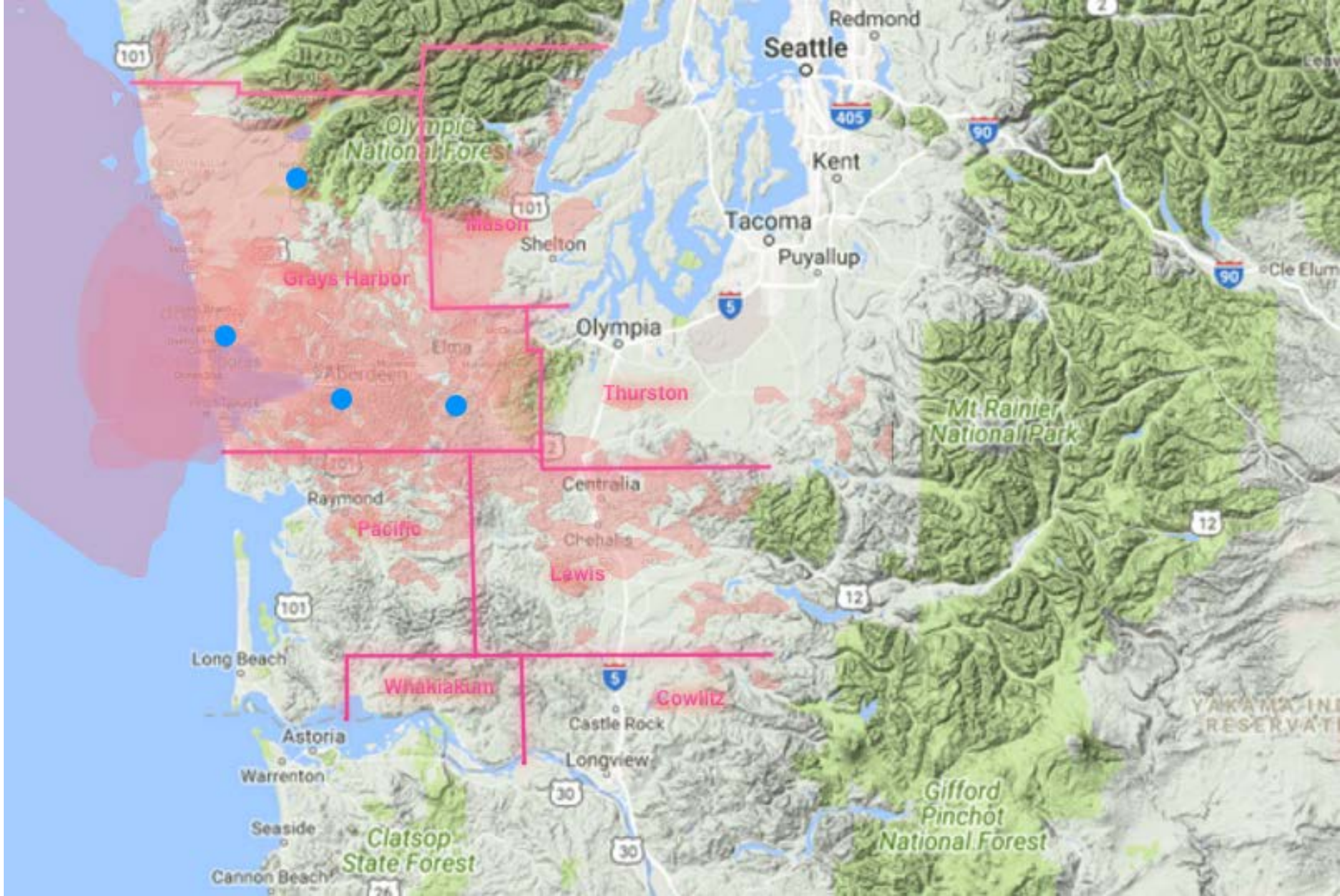
RF (UHF) linking for survivability

- Not dependent on Internet or PSTN

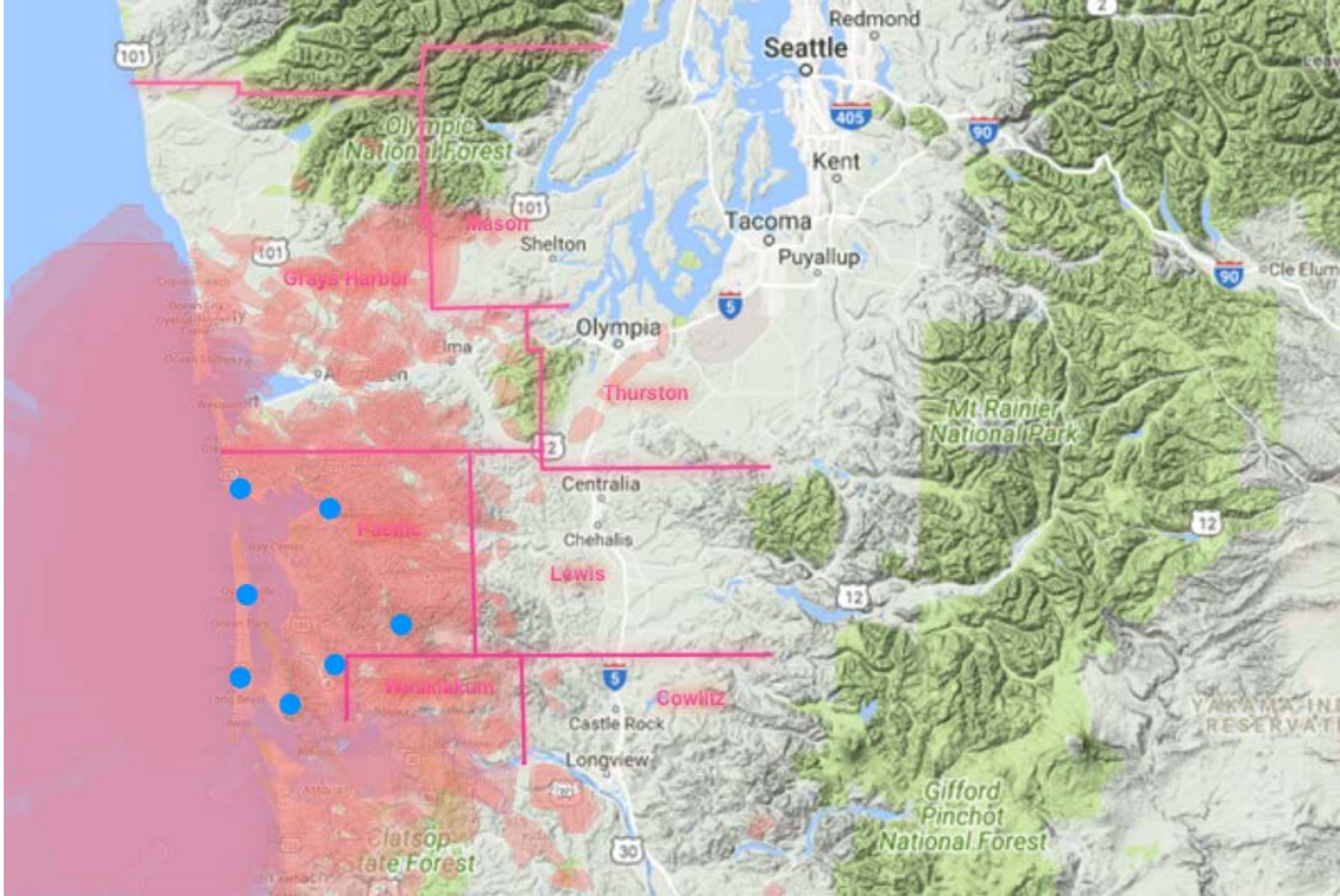
Multiple flexible links available

- Normally all linked together as a single system
  - Multiple secondary pathways in case of failure
  - Can operate as several separate nets

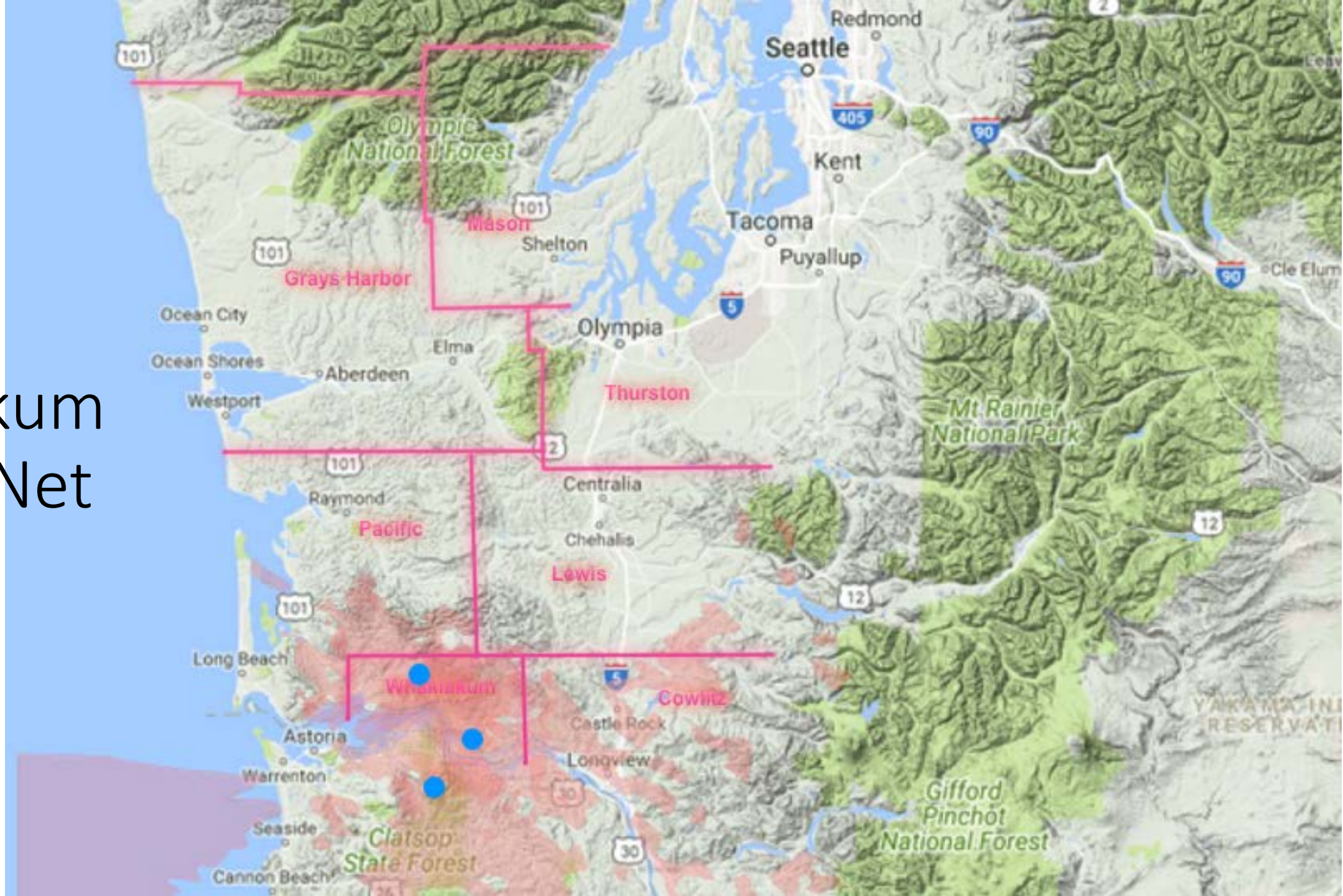
Grays Harbor Net



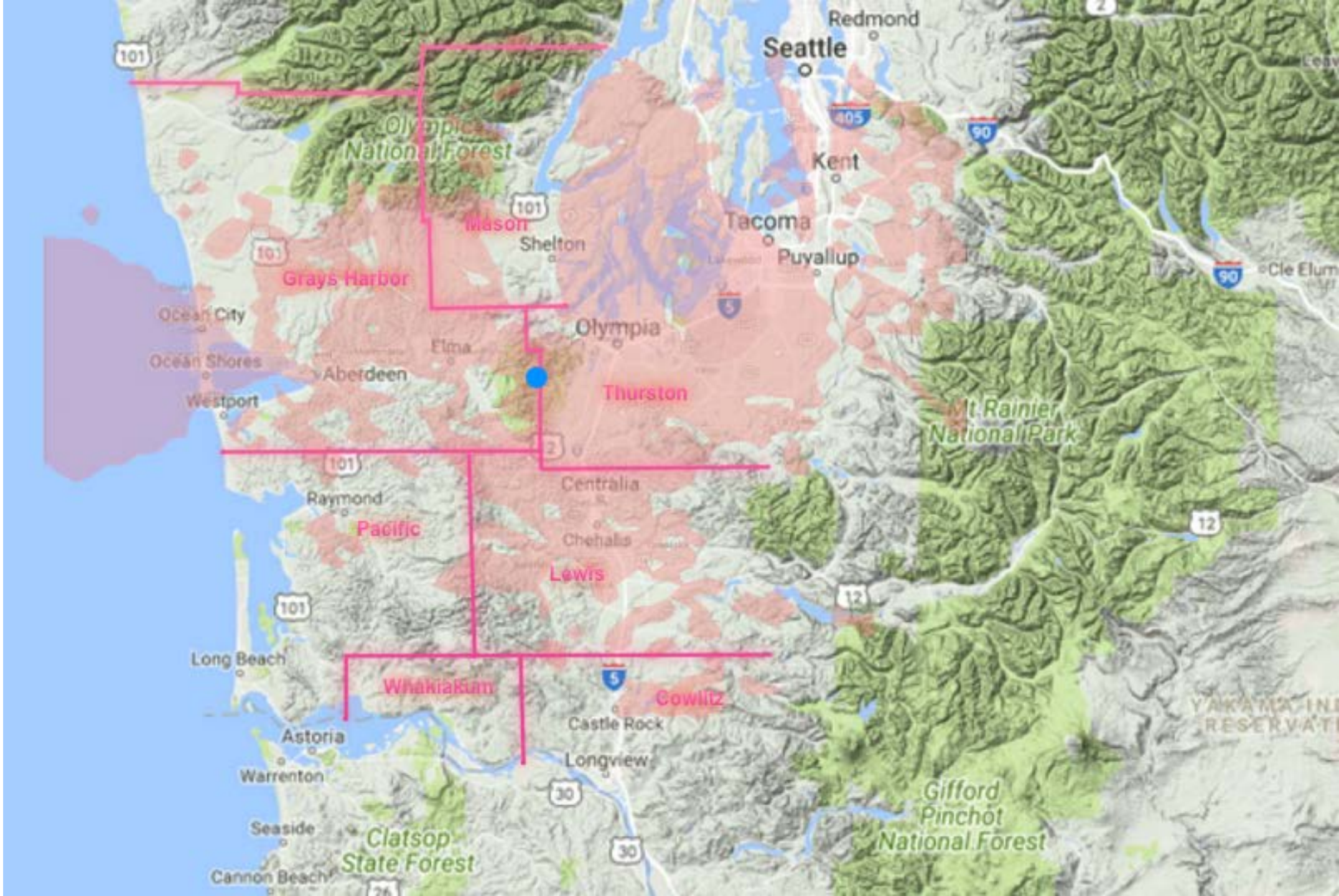
Pacific County Net



Wahkiakum County Net

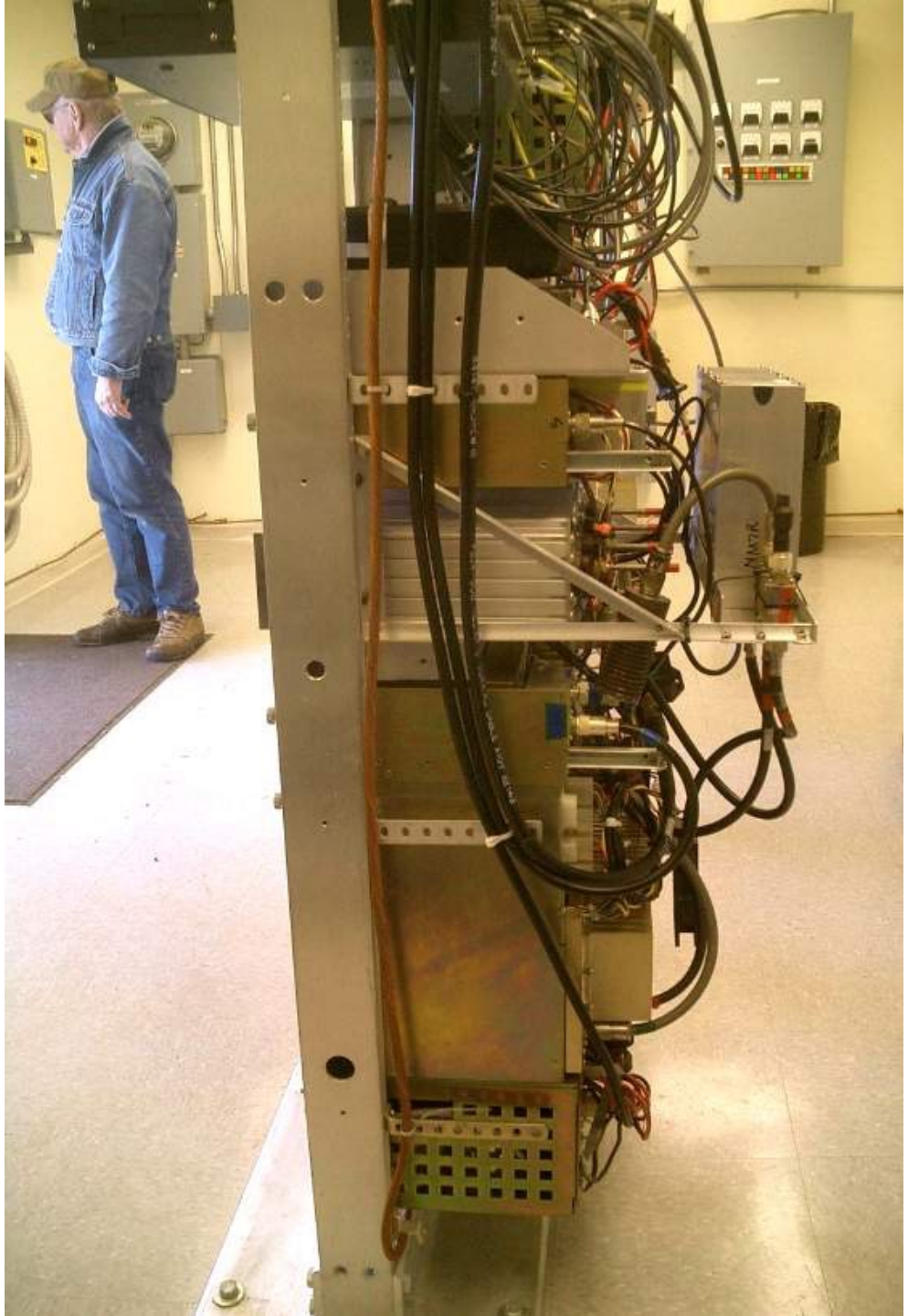


District Three EOC Net on Capitol Peak



Seismic Survivability

Where available, equipment is mounted in racks



Seismic Survivability

Otherwise, we strap the equipment to something sturdy (like a wall)

Maintenance is on-going

Service Trips:

year - trips - miles

2017 - 18 - 1168
2016 - 20 - 1544
2015 - 17 - 1983
2014 - 15 - 1263
2013 - 14 - 1418
2012 - 8 - 1065
2011 - 19 - 1945
2010 - 36 - 5105
2009 - 40 - 4553
2008 - 34 - 4166

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or Google: “BeachNet Repeaters”

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