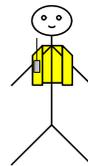
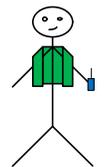


Map my NEMCo

The last mile

rev 3

2026-2-10



Connecting the last mile

www.northshoreEMC.com



MAP My NEMCo

The issue

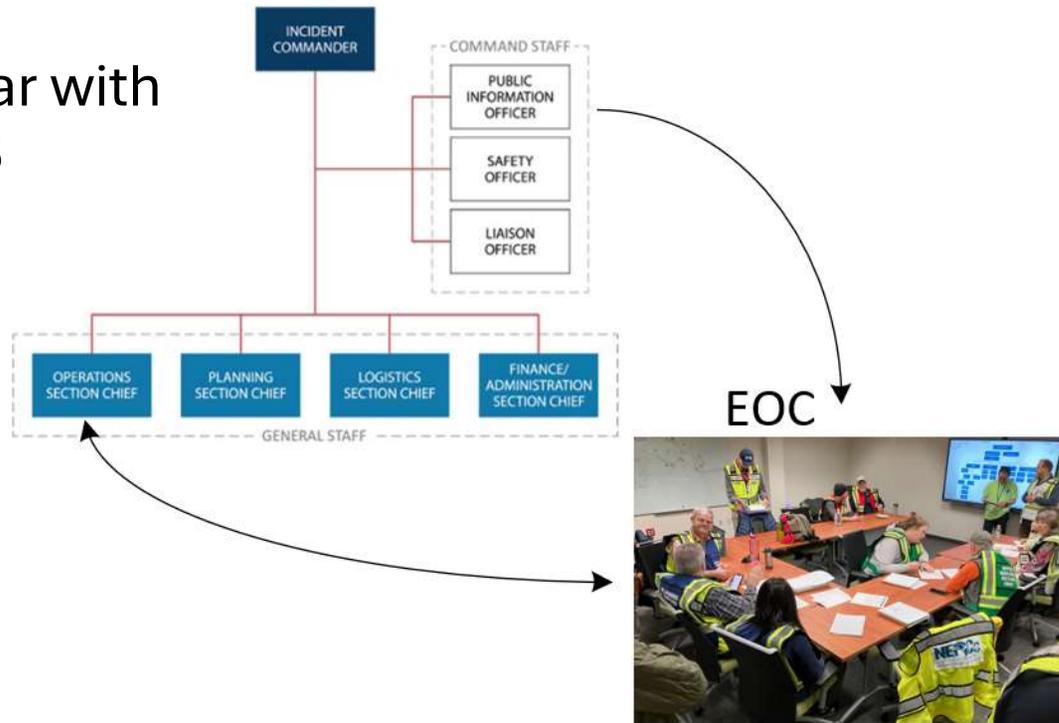
To improve communications during and after a natural disaster or other community hazard.

This proposes a method to build a framework to communicate with different neighborhoods and CERT members within the NEMCo area when cell phones are down.

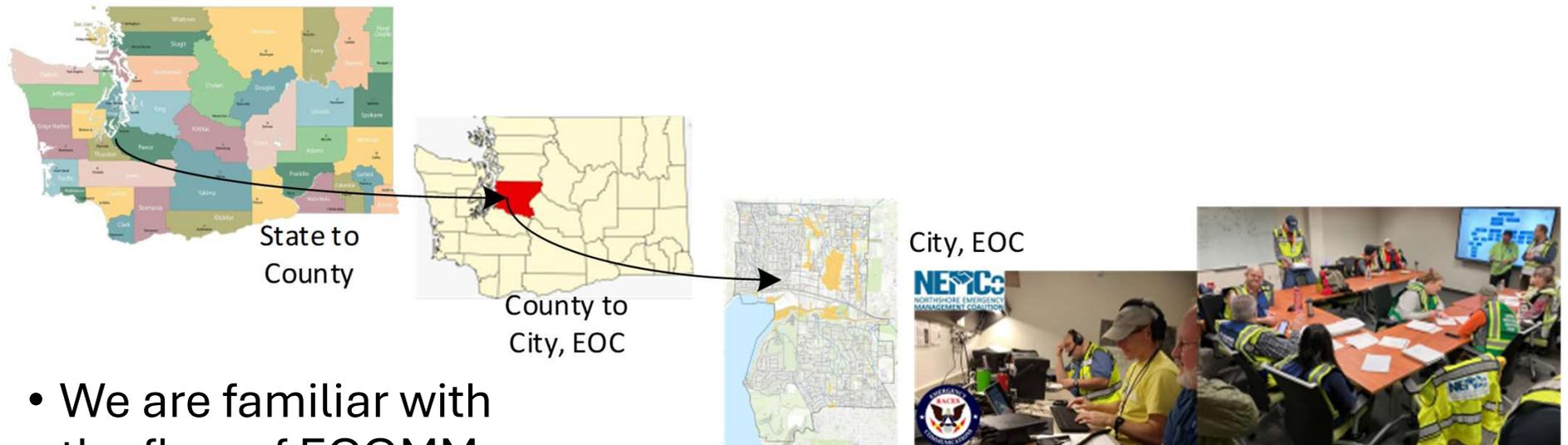
To build a framework for better participation of the CERT graduates and the public.

MAP My NEMCo

- We are familiar with NIMS and ICS



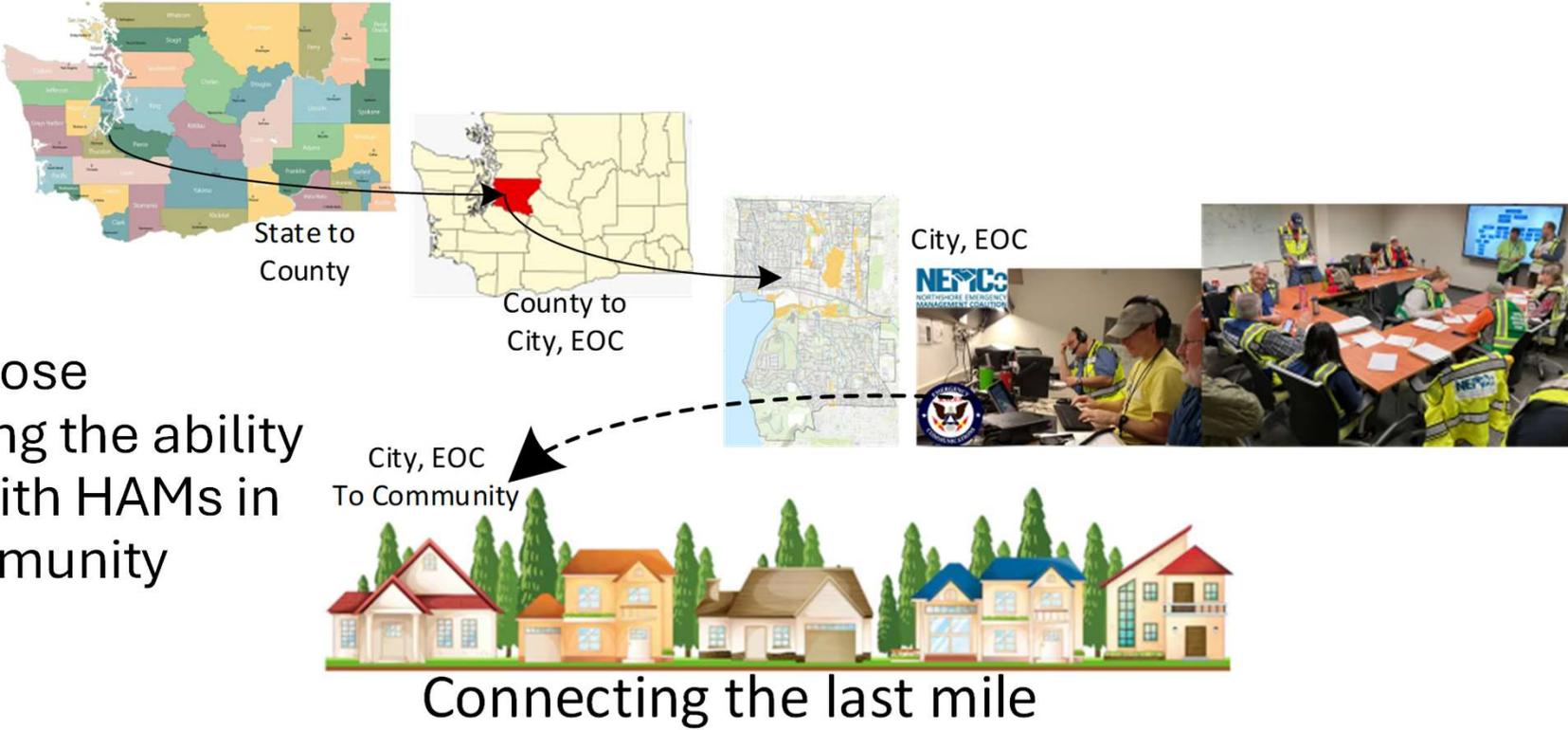
MAP My NEMCo



- We are familiar with the flow of ECOMMs traffic

- There is one more piece to this puzzle.
- Connect the last mile.

MAP My NEMCo



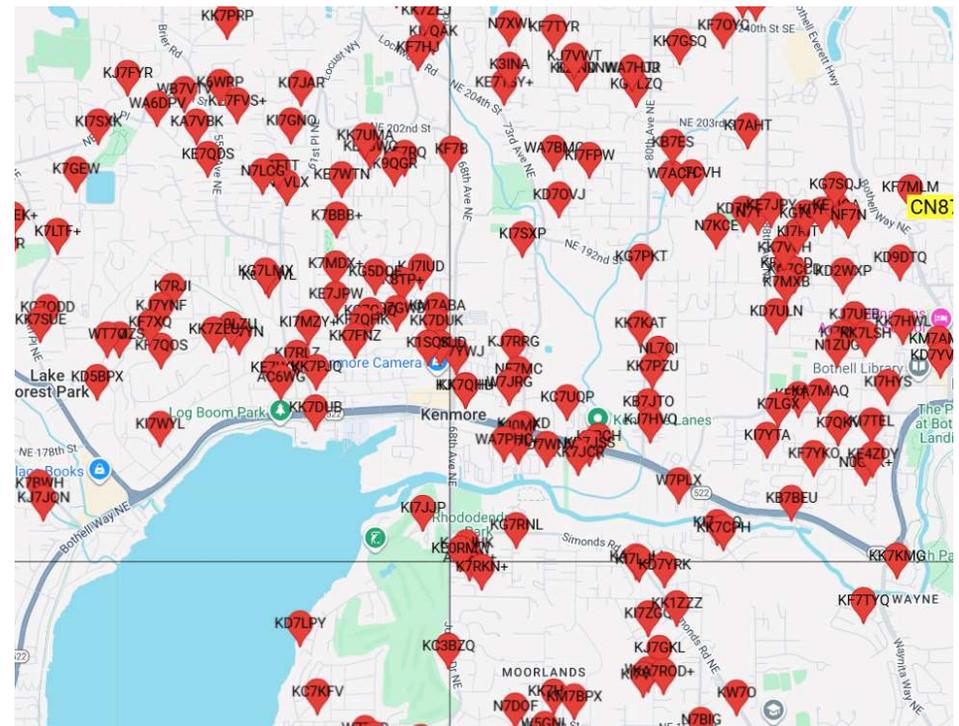
- We propose expanding the ability to talk with HAMs in the community

MAP My NEMCo

- The NEMCo service area has a good distribution of HAMs.



HAMs in North Kenmore

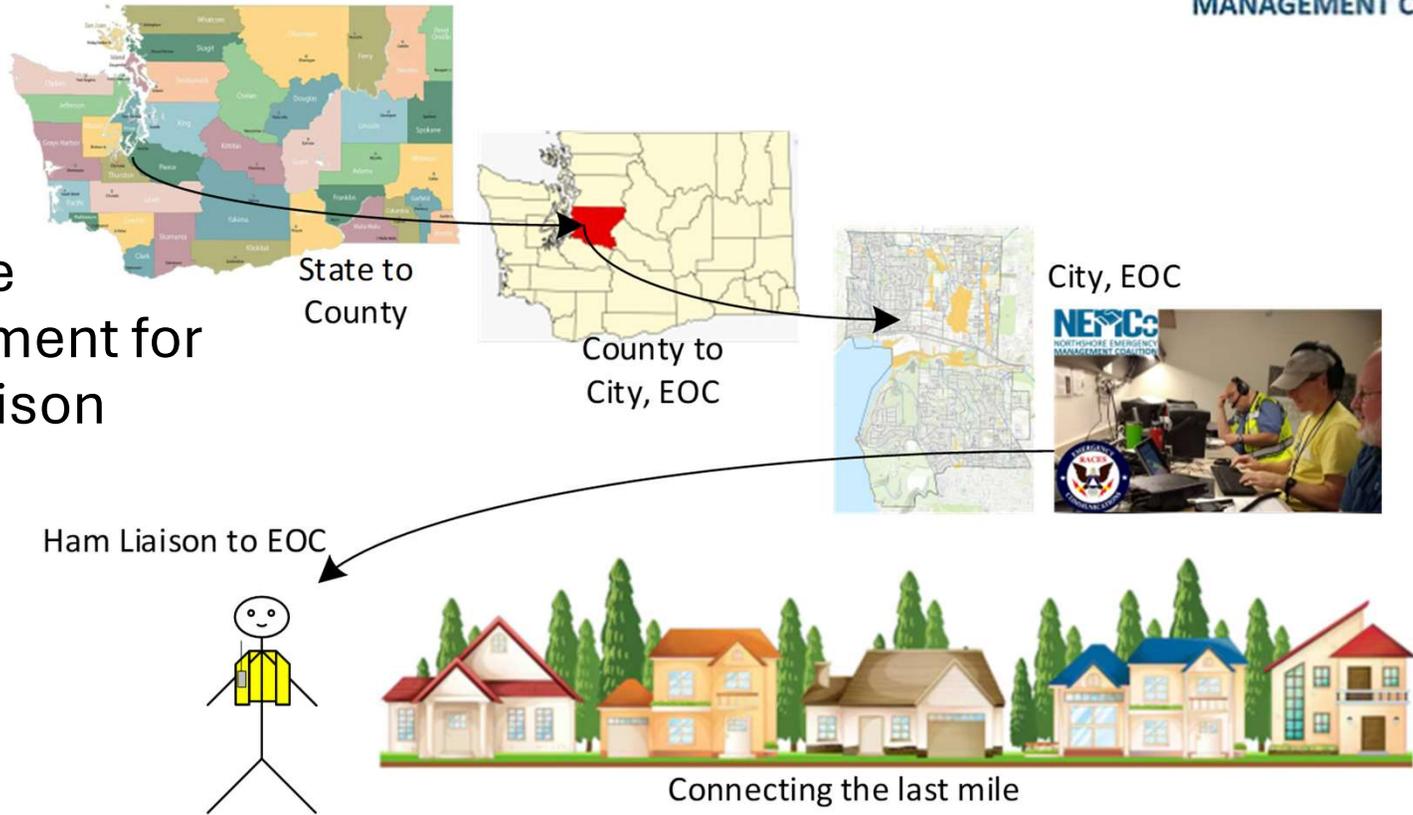


North Kenmore

haminfo.tetranz.com/map

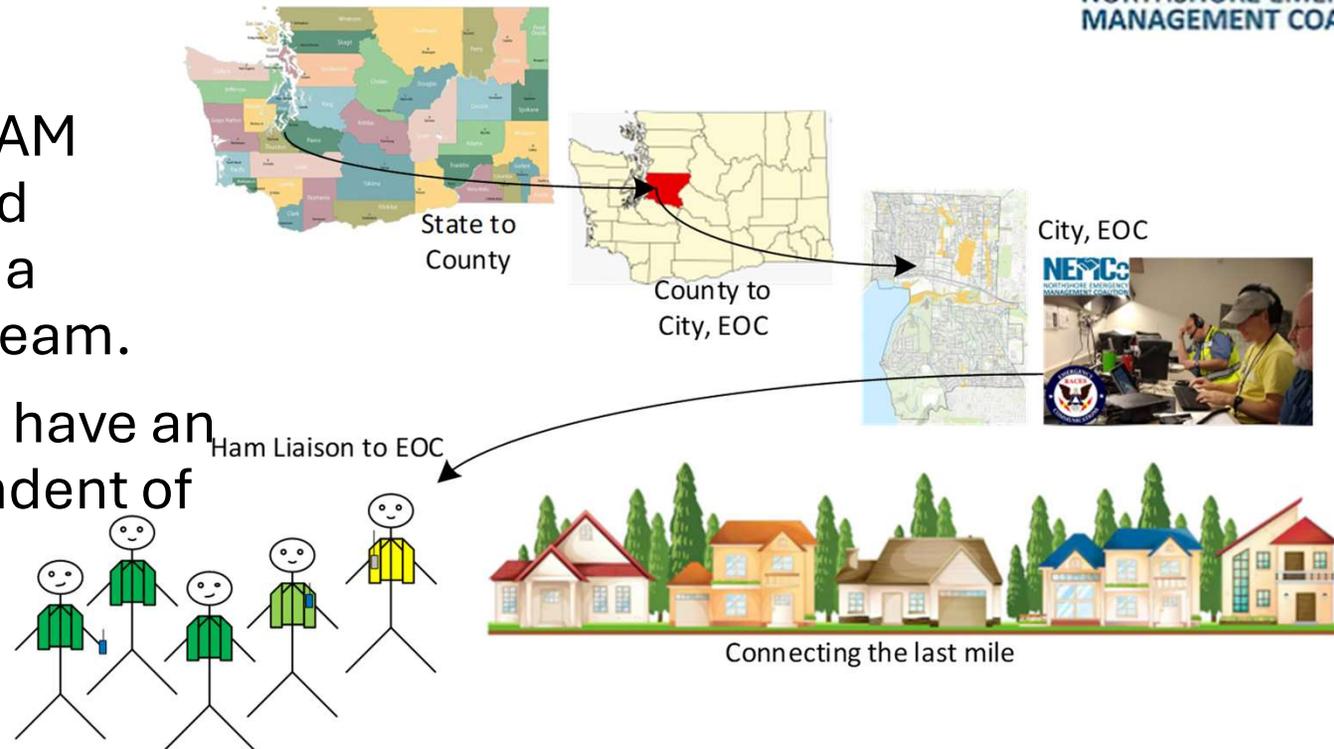
MAP My NEMCo

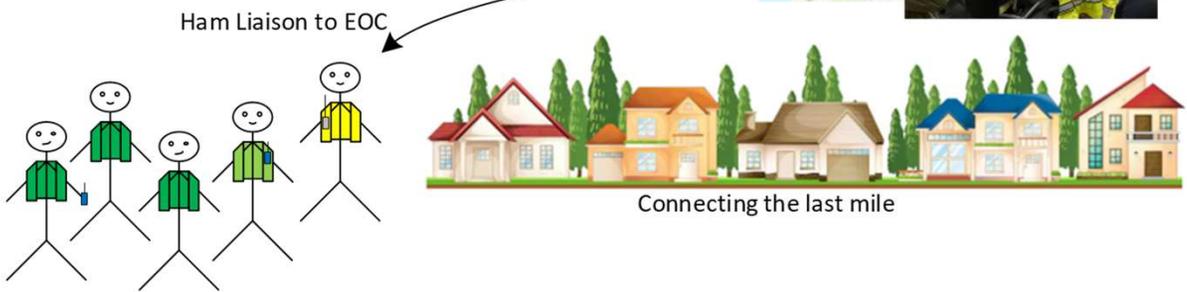
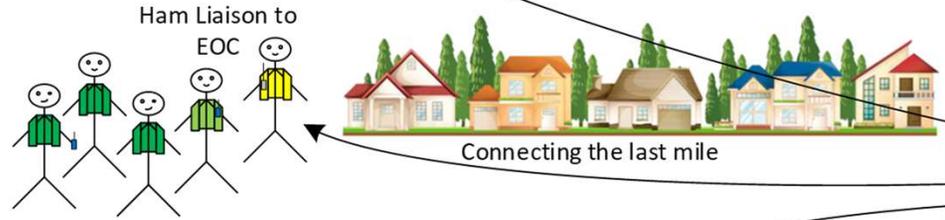
- Low time commitment for HAM Liaison
- We train



MAP My NEMCo

- Ideally the HAM Liaison would interact with a community team.
- Teams could have an lead independent of the HAM.

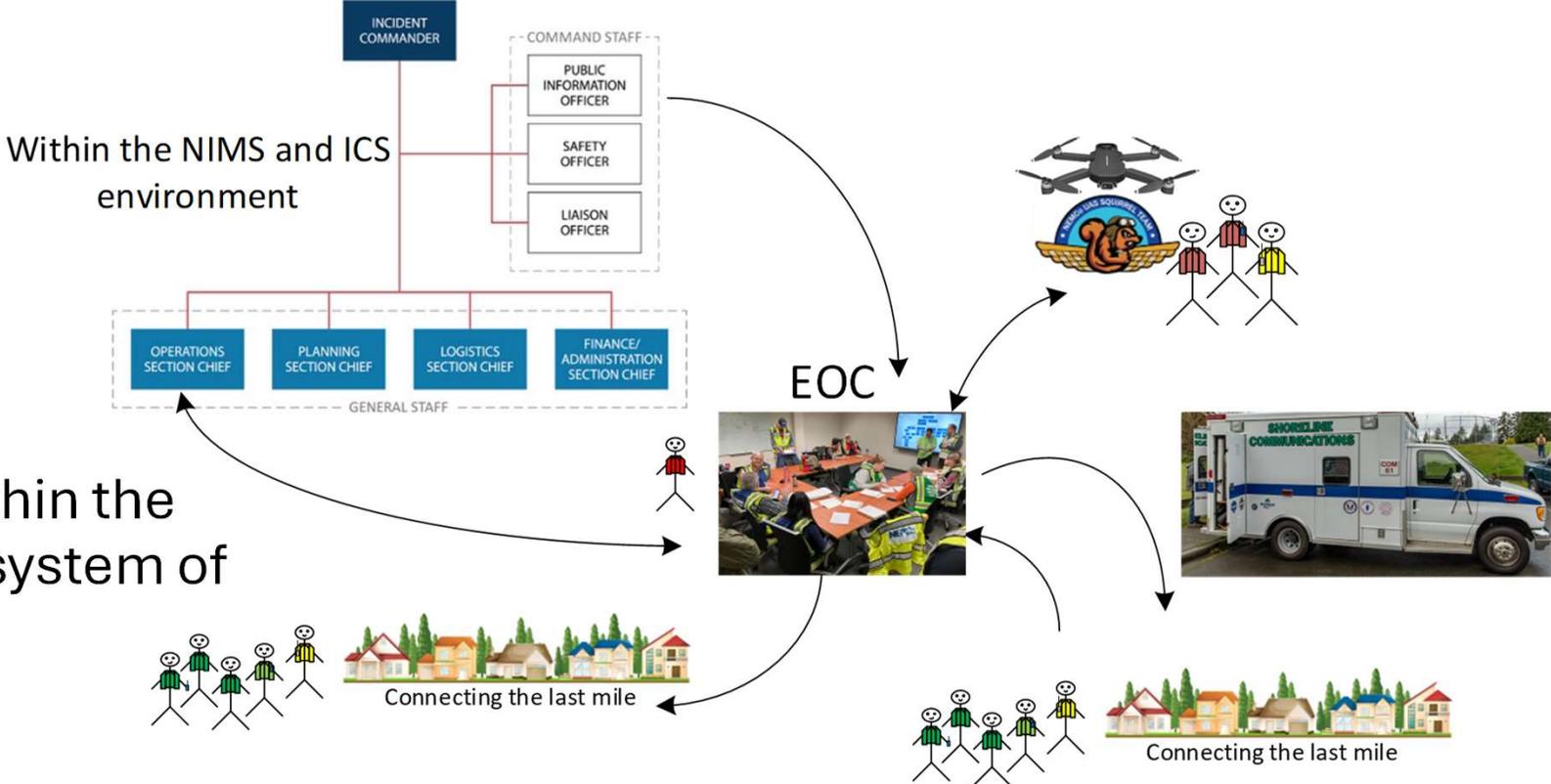




MAP My NEMCo

- Gives HAMs and CERT grads a community to join.
- The framework would slowly grow with time.

MAP My NEMCo



- Works within the modular system of ICS.

MAP My NEMCo

Defining neighborhood zones

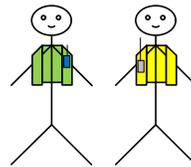
- Kevin has talked to HOAs and crime watch neighborhoods that have created their own “EOC” and would like to contact a NEMCo EOC.
- Kevin would like some information to give to them so they could communicate with us.



MAP My NEMCo

- In the absence of neighborhoods stepping forward to contact us, we can define a reasonable neighborhood for CERT graduates to join.
- And a framework to communicate.

Defining neighborhood zones





MAP My NEMCo

Example:

- Frequency plan ICS 205
- Use Simplex for local
- Repeaters for County Comms
- OPS1 Between EOCs (2m)
- To Field ops
 - OPS2 within Kenmore (70cm)
 - OPS3 in LFP (2m)

INCIDENT RADIO COMMUNICATIONS PLAN		1) Incident Name NEMCo RACES Member Reference		2) Date/Time Prepared 2/9/2020		3) Operational Period Date/Time 2/13/2020 - 12/31/2020			
4) Basic Radio Channel Use:									
Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Resource Net	RESNET	NEMCo RACES	442.0000 W	141.3	447.0000 W	141.3	A	Also Sunday Night Net
	Region Net	REGION	NEMCo EOCs	442.0000 W	141.3	447.0000 W	141.3	A	Regional Call-in Channel
	Simplex Net	OPS_S1	NEMCo RACES	147.5600 W	n/a	147.5600 W	77.0	A	Simplex RESNET
	Bkup Simplex	OPS_S2	NEMCo RACES	446.3000 W	n/a	446.3000 W	77.0	A	Backup Simplex Net
	Bkup Simplex	TAC_S3	NEMCo RACES	147.6000 W	n/a	147.6000 W	77.0	A	Simplex Voice Channel
	Bkup Simplex	TAC_S4	NEMCo RACES	446.4000 W	n/a	446.4000 W	77.0	A	Simplex Voice Channel
	NUD 6m Guard	NUD_6M	NUD, RACES	52.3700 W	n/a	52.3700 W	100.0	A	NUD 6m Simplex Voice
	EOC Packet	PKTNET	NEMCo EOCs	223.4200 W	n/a	223.4200 W	n/a	A	NEMCo EOC Packet Channel
	6m Packet	PKT_6m	NEMCo RACES	50.7000 W	n/a	50.7000 W	n/a	A	6m WL/PKT P2P Channel
	2m Packet	PKT_2M	NEMCo RACES	144.9000 W	n/a	144.9000 W	n/a	A	2m WL/PKT P2P Channel
	70cm Packet	PKT_70	NEMCo RACES	440.8000 W	n/a	440.8000 W	n/a	A	70cm WL/PKT P2P Channel
	Unlicensed Interop	CH5TG5	RACES, CERT, Agents	462.6625 N	79.7	462.6625 W	79.7	A	CERT, Field Agents
	Limited Simplex	442OUT	NEMCo RACES	442.0000 W	n/a	442.0000 W	141.3	A	NEMCo Repeater output
	Limited Simplex	447_IN	NEMCo RACES	447.0000 W	n/a	447.0000 W	141.3	A	NEMCo Repeater input
	Old RESNET	RESNT2	NEMCo RACES	443.7250 W	n/a	448.7350 W	103.5	A	Until 442 is up
5) Special Instructions:						6) Prepared By (Communications Unit, date/time, signature)			
Activation: Check-in to 'Resource Net' with 48-hr AVAILABILITY. NCS: Follow Net Script. In case of repeater failure S1_NET or a backup. Avoid interference on all channels by moving to bkup or 20kHz steps. Note the Operational Period (3); This form will change as conditions warrant.						NEMCo RACES 12-Feb-2020 @ 1900L J.Rumsey - Chief Radio Officer IAP Page: 1			

Periodic nets to distribute information TBD

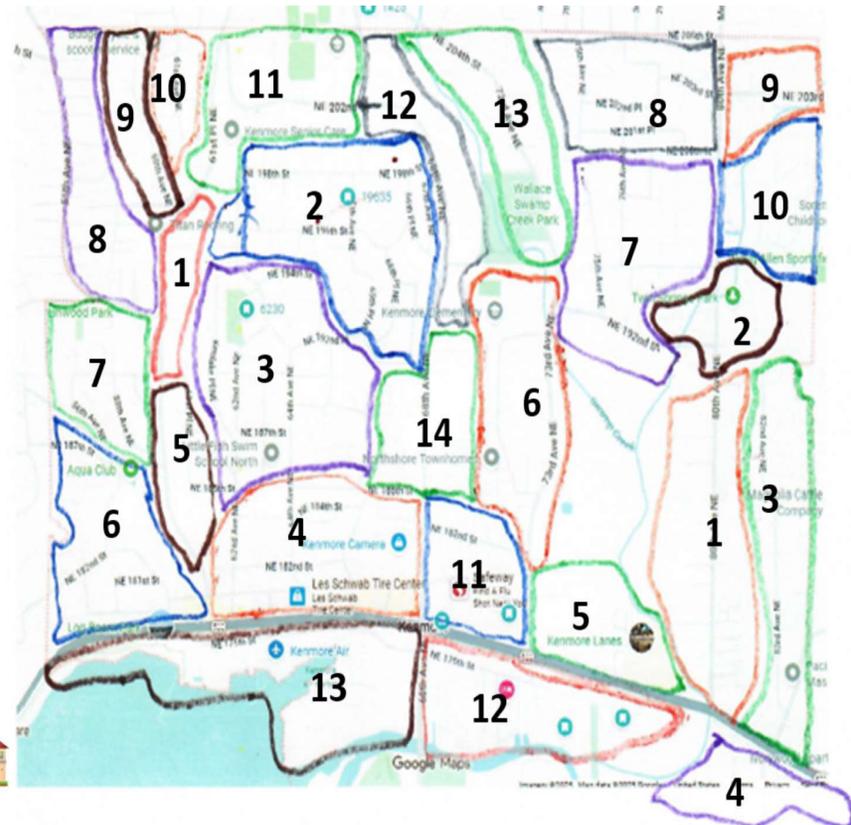
MAP My NEMCo

- Each Zone would have a HAM Liaison.
- Intra-zone comms can be done with FRS/GMRS within the neighborhood
- To reduce confusion for Field Ops and between communities and neighborhoods FRS/GMRS channels would be recommended.



Connecting the last mile

FRS Channels



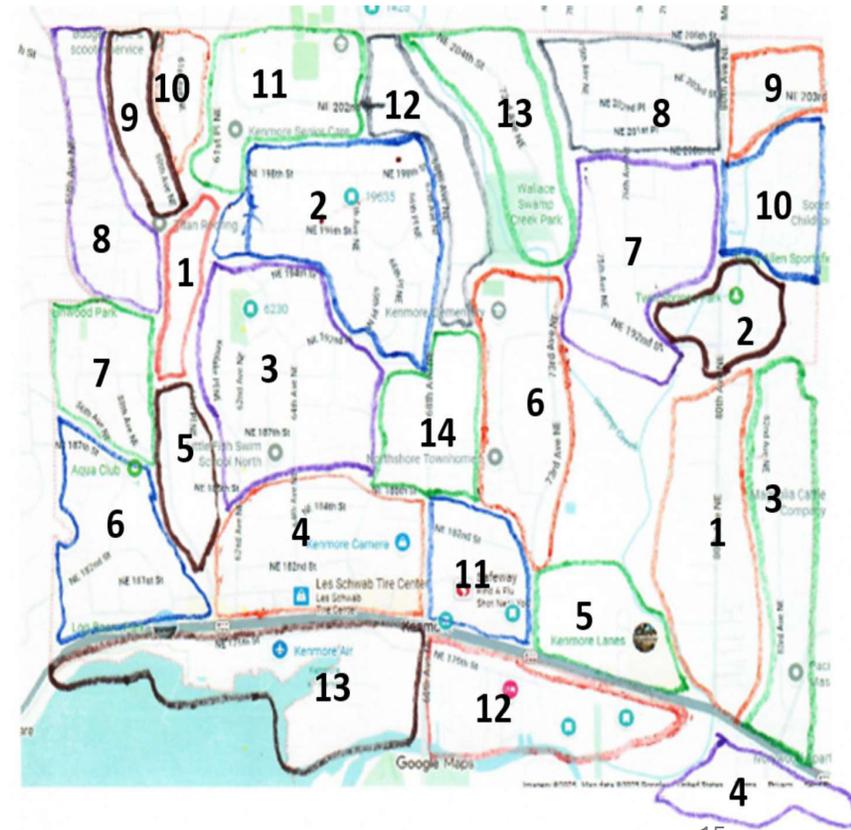
MAP My NEMCo

FRS -> HAM -> EOC-> City

Each Zone would be assigned a FRS/GMRS channel.

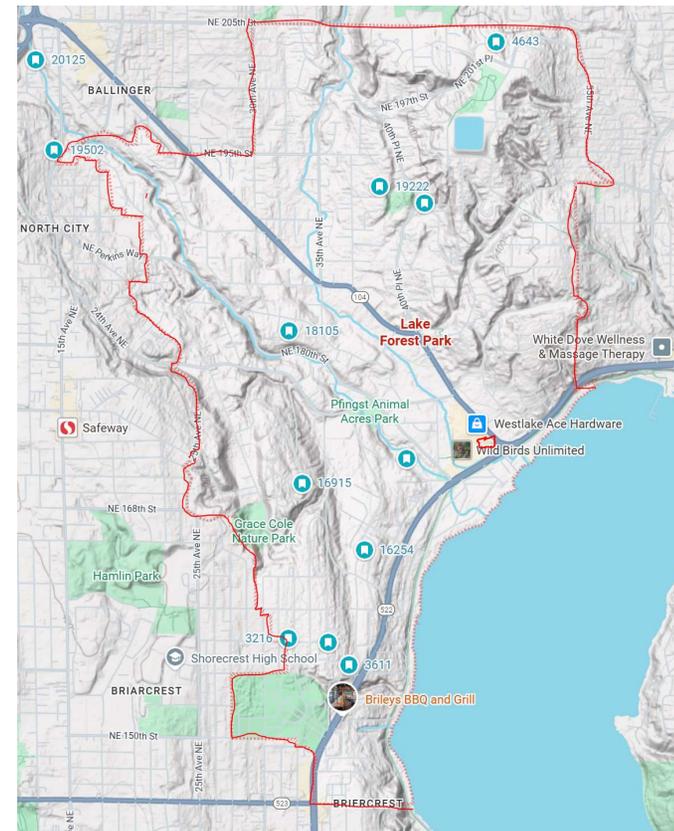
For each Zone we would want to recruit:

- Zone captain (ideally CERT trained)
- Ham radio liaison
- Neighborhood Members
- Continuing education and practice would be provided for communications protocols.



MAP My NEMCo

- Zone maps need to be created for:
 - South Kenmore
 - Lake Forest Park
- Topography makes LFP a bit more tricky.



MAP My NEMCo

- FRS/GMRS map creation for LFP

- https://en.wikipedia.org/wiki/General_Mobile_Radio_Service



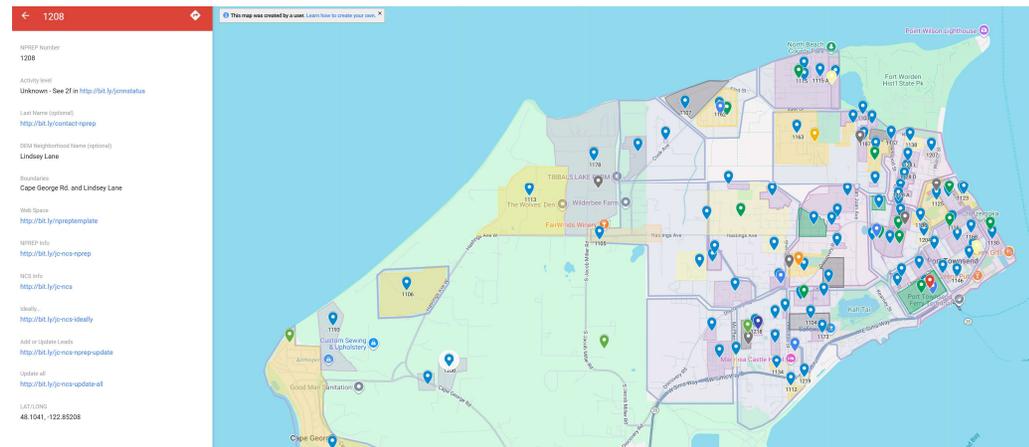
Frequency ↕	Channel ↕	FRS power ↕	FRS bandwidth ↕	GMRS power ↕	GMRS bandwidth ↕
462.5625 MHz	1	2 W	12.5 kHz	5 W	25 kHz
462.5875 MHz	2	2 W	12.5 kHz	5 W	25 kHz
462.6125 MHz	3	2 W	12.5 kHz	5 W	25 kHz
462.6375 MHz	4	2 W	12.5 kHz	5 W	25 kHz
462.6625 MHz	5	2 W	12.5 kHz	5 W	25 kHz
462.6875 MHz	6	2 W	12.5 kHz	5 W	25 kHz
462.7125 MHz	7	2 W	12.5 kHz	5 W	25 kHz
467.5625 MHz	8	0.5 W	12.5 kHz	0.5 W	12.5 kHz
467.5875 MHz	9	0.5 W	12.5 kHz	0.5 W	12.5 kHz
467.6125 MHz	10	0.5 W	12.5 kHz	0.5 W	12.5 kHz
467.6375 MHz	11	0.5 W	12.5 kHz	0.5 W	12.5 kHz
467.6625 MHz	12	0.5 W	12.5 kHz	0.5 W	12.5 kHz
467.6875 MHz	13	0.5 W	12.5 kHz	0.5 W	12.5 kHz
467.7125 MHz	14	0.5 W	12.5 kHz	0.5 W	12.5 kHz

MAP My NEMCo

Example of another community

- It is always good to look at **other programs**.
- In Jefferson County around Port Townsend

www.co.jefferson.wa.us/1067/5016/Preparedness-Planning

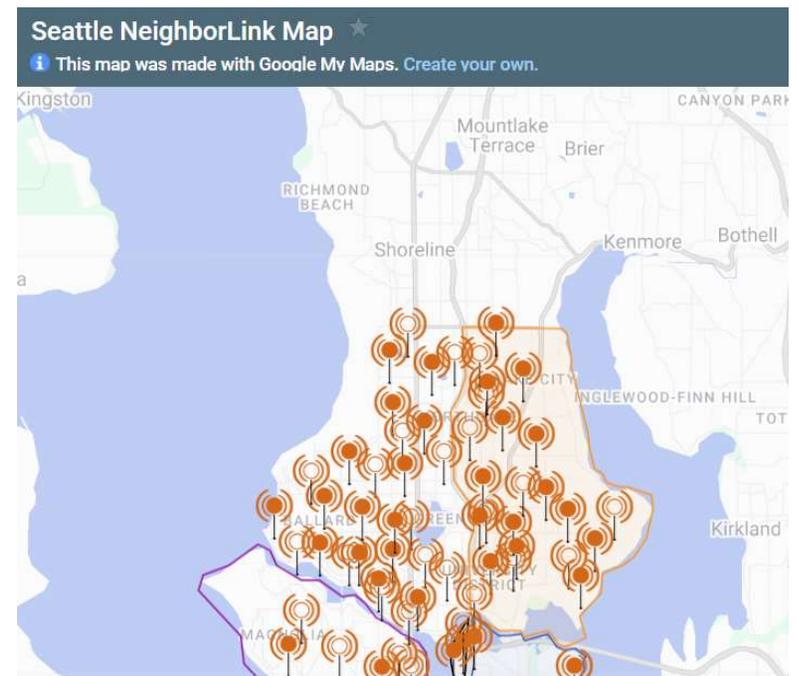


MAP My NEMCo

Example of another community

- It is always good to look at **other programs**.
- North Seattel HUBs program

<https://seattleemergencyhubs.org/seattle-emergency-neighborlink-map/>

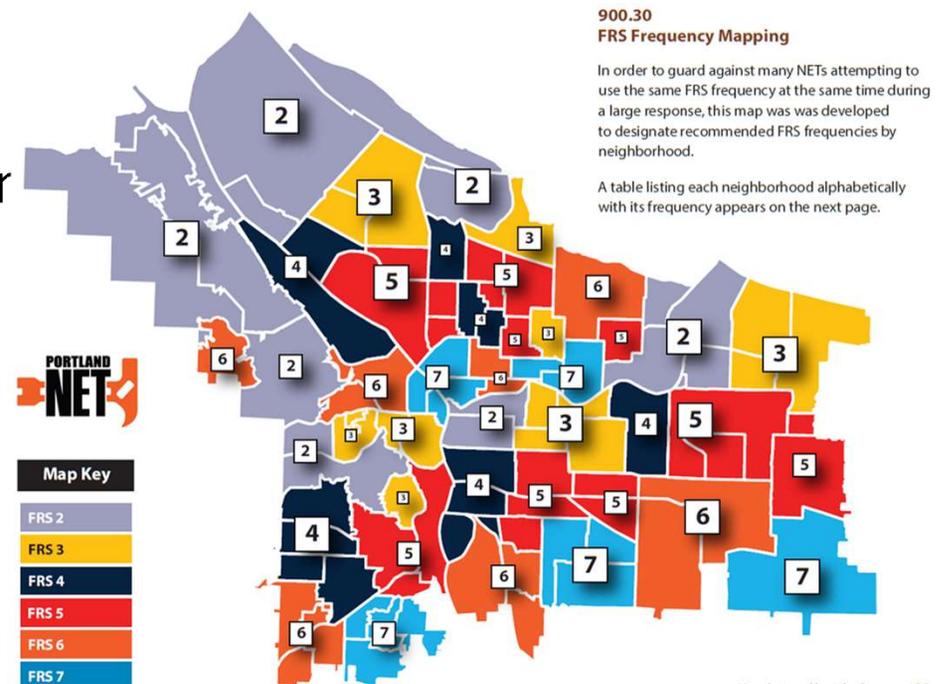


MAP My NEMCo

Example of another community

- It is always good to look at **other programs**.
- Portland, Neighborhood Emerger Teams (NET)

www.portland.gov/pbem/neighborhood-emergency-teams



MAP My NEMCo



- How do we move forwards?

MAP My NEMCo

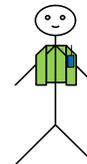
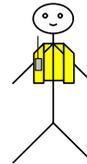
TO DO LIST



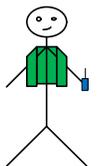
- To accomplish building neighborhood zones, we would need:
 - Entry form for HOA and neighborhood watches to enter.
 - One page handout for neighborhood lead and HAM Liaison showing map, detailing frequencies, some radio lingo, Neighborhood lead, 5th Sat drill dates, first steps in a disaster.
 - A way to record all these people.
 - Simple way to describe location (central cross street?). A clear tactical reference for each neighborhood zone.
 - Eventually a website page. northshoreEMC.com
 - Training material
 - Refined comms plan and example scripts
 - Exercise planning
 - Mentors
 - Outreach

MAP My NEMCo

- Positions that need to be filled:
 - Co-Lead
 - GIS map maker and documentation. Do you love maps?
 - Training coordinator.
 - data management (Chase has offered his services)
 - Outreach / entry introduction (once the system is figured out.)
 - Talk to CERT grads, Booth at fairs, etc
 - HAM mentor-RACES responsibility
 - Help train and retain new HAMs.
 - Community organizer/trainer



Connecting the last mile



MAP My NEMCo

- Thoughts?
- Comments?



www.northshoreEMC.com/contact



Connecting the last mile

MAP My NEMCo

