

# CLACKAMAS CSOO RADIO GROUP

## BOARD OF DIRECTORS MEETING

June 16, 2021 / 9:00AM

**This will be a ZOOM Meeting**

Join Zoom Meeting

<https://clackamascounty.zoom.us/j/89006024138>

Phone in: (253)215-8782 Meeting ID: 890 0602 4138

1. Call the Board of Directors meeting to Order - Chair Chief Rick Huffman
2. Roll Call of Partners: (19/10)

a. City of Canby	h. City of West Linn	o. Molalla Fire District
b. City of Gladstone	i. Aurora Fire District	p. Sandy Fire District
c. City of Lake Oswego	j. Canby Fire District	q. Tualatin Valley Fire & Rescue
d. City of Milwaukie	k. Clackamas County Fire District #1	r. Clackamas County Sheriff
e. City of Molalla	l. Colton Fire District	s. Clackamas County Health
f. City of Oregon City	m. Estacada Fire District	
g. City of Sandy	n. Hoodland Fire District	
3. \*Approval of Minutes of April 21, 2021, Board Meeting - Rick Huffman
4. Public Comment - Rick Huffman
5. Communications - John Hartsock
6. Financial Report - May 2021 - John Hartsock
7. Committee Reports
  - a. Executive Committee - Rick Huffman
  - b. Technical Committee - John Hartsock
  - c. Citizen Accountability - John Hartsock - Next Meeting August 18, 2021 Zoom
8. Old Business: (\* Action Item)
  - a. System Management: Ron Polluconi
  - b. System Upgrade/Replacement
    - i. Project Status / Procurement: Bjorn Morfin / John Hartsock
    - ii. 900 - 800 Paging: Ron Polluconi
    - iii. Portable Radio antenna: Ron Polluconi
    - iv. DVRS - Repeaters: Ron Polluconi
9. New Business: (\* Action Item)

- a. \* Approval of Oregon Department of Forestry Communication Infrastructure Grant
- b. Mobile Command Unit
- c. Factory Mutual Radio Rating
- d. **Next Board Meeting July 21, 2021 9:00A ZOOM**

10. Open Agenda

11. Adjournment

# **CLACKAMAS C800 RADIO GROUP**

## **BOARD OF DIRECTORS MEETING**

### **Meeting Minutes of the April 21, 2021 Meeting**

**This meeting was held via ZOOM.**

**1. C800 Board Meeting Called to Order at 0900.**

**2. The following were in attendance:**

City of Canby – Chief Jorge Tro

City of Gladstone: Chief John Schmerber /  
Chief Rick Huffman / Dep Chief Randy  
Hopperstad

City of Lake Oswego: Sue Scobert / Dep Chief  
David Morris

City of Milwaukie / Capt Robbie Graves

City of Sandy: Chief Ernie Roberts

City of West Linn: Chief Peter Mahuna

Aurora Fire District: Ops Chief Greg Dyke

Canby Fire Dist: Chief Jim Davis

Clackamas Fire Dist # 1 Div Chief Michael  
Carlsen, Jessamyn Ode

Hoodland Fire Dist: Chief Jim Price

Molalla Fire Dist: Lt Mike Penunuri

Sandy Fire – Chief Phil Schneider

CCOM: Toni Sexton / Megan Neece / Cheryl  
Bledsoe

CC Disaster Mgmt: Jamie Poole

Clackamas County – Brian Nava

WCCCA: Ron Polluconi

C800: John Hartsock / Bjorn Morfin

Citizens: Melissa Framiglio / Chad Dolstrom /  
Roger Allen / Bitsy Ellis

**3. Approval of Minutes – March 17, 2021 Board Meeting**

Chief Jim Davis moved, and Chief Phil Schneider seconded to approve the minutes. Motion passed unanimously.

**4. Public Comment:** Chief Huffman explained that this is time set aside for public comment. With respect to the public safety leadership and technical experts attending this meeting, comments should be made only during this time to avoid other interruptions for the remainder of the meeting.

Melissa Framiglio of the Skyland Neighborhood asked if the public was not supposed to ask questions during the meeting? Chief Huffman confirmed. Questions can be brought up at the next month's meeting or sent to him directly.

**5. Communications:** None.

**6. Financial Report – March 2021 - John Hartsock**

John reported that they are tracking on budget.

**7. \*FY 2021/2022 Budget Hearing / Approval of the FY 2021/2022 Proposed Budget – John Hartsock**

Chief Jim Davis asked what the anticipated carry forward amount will be? John said we do not know yet. It deals with the getting the sites along Hwy 224 completed. They are running into issues such as getting access to the sites. They won't have the answer until July or August.

**Chief Schmerber made a motion and Chief Mahuna seconded to approve the FY 2021/2022 Proposed Budget. Motion passed.**

## 8. Committee Reports

**Executive Committee – Chief Rick Huffman:** No meeting was held.

**Technical Committee - John Hartsock:** They will be meeting next week. Nothing to report at this time.

**Citizen Accountability - John Hartsock:** Next meeting May 19, 2021 via Zoom.

## 9. Old Business:

**System Management - Ron Polluconi:** Ron said that they didn't lose power at any of the primary sites due to the ice storm. They sustained damage to a number of antennas, and they are repairing those. They were able to get access to some of the higher elevation sites including Goat Mountain.

The overall analog system remains up and operational. They will continue to experience some impact as they are cutting in new sites and attaching them to the older sites.

### System Upgrade/Replacement

#### **Project Status/Procurement – Bjorn Morfin / John Hartsock:**

Bjorn reported that since the last meeting, they obtained their permit to work on Highway 224. They are actively back out at Whalehead, working on the power. They are clearing the road to Memaloose. They hope to reach the site by the end of the week. Bjorn met with PGE to get power out to Memaloose, but PGE is still back logged.

They will start to work at Oak Grove in about a month. Either the Forest Service or C800 will be clearing the roads to that site.

For the TD&H site, Bjorn is speaking with the Forest Service weekly to check on the permit. He is assured that construction will not be held up.

There is no progress at the Lake Oswego sites. John said that the County Administrator met with the Skyland group. He will continue to stay involved. They will hold off doing any more meetings until more testing can be done in that area. This could be available around mid-May.

**900 MHz Paging - Ron Polluconi:** Ron said they have been deploying all the new infrastructure stations. They are focused on existing sites, which are nearly complete. They are still making their way to the higher elevation sites. They are now moving into new sites and it's going really well. They are interconnecting the new microwave systems and as they are completed, they will be bringing the new paging system connectivity back. They will be working on this in late May and through August.

Nothing new on the 800-voice paging.

**Portable Radio Antenna- Ron Polluconi:** Ron shared that they received a large number of the monoband antennas and those are getting distributed. They had to ration the multi-band radios and prioritized those in fringe coverage areas. They have received very good feedback on the multi-band radios. There is a worldwide shortage of certain parts.

Chief Schneider said they haven't been contacted about the radios yet. He thought they would be one of the fringe coverage areas as they are only getting 55-60 strength on their radios. Ron said they are working their way towards him and they should be with the next group of antennas they receive.

Chief Schneider asked what was timeline for testing and when it will get turned on?

Ron showed a map and gave an update of their progress in each area. They are currently in the process of testing the central simulcast system.

John said that at their meeting with Motorola, he has requested the test plan and coverage maps. He noted that they can't start the testing in Lake Oswego until the system to the west is completed as it is a large contributor.

Ron said they could provide coverage maps and Google map overlays. He offered to do a demo of how that coverage works at a later time.

Chief Davis asked when was the full implementation date to go fully digital? Ron said it is not set but their target is mid to late July.

Chief Davis said he heard that each radio has to be touched before it goes digital. Ron confirmed that it will be users that will make the change. They are making a video to help with the transition.

**BDA's / DVRS – repeaters – Ron Polluconi:** Ron explained that the fire marshals have been working together to prepare to cut over to the new system, which will change the organization of all the frequencies. This affects the BDA systems in buildings.

Ron showed a letter to all the registered BDA owners from the fire marshals (TVF&R, Clackamas, Hillsboro, and Lake Oswego) asking them to put a moratorium on the use of amplification and actually shut those down until June 1. They are asking they bring them back up in September. This impacts those who are used to that inbuilding coverage. During that time, they will work with building owners to enter into a new agreement and re-channelizing them to work with the new system.

Ron said he is happy to provide a list of the buildings/areas affected if anyone needs it.

Sue Scobert asks if this affects all BDAs? They use a BDA in the new city hall for the police department.

Ron said yes, it affects all BDAs. If they chose to turn it back on once it's been reprogrammed, then they are back on and in the new system. She has the ability to home in on that timing.

Chief Schneider said when their BDA was installed at Sandy HS, the police channels were unfortunately not installed. When this switch over occurs, can other channels be installed too?

Ron said that these will be broadband systems for all channels.

John said he will get the list from Ron and send it out to everyone.

Ron continued with this DVRS update. He said that they got some input from the fire defense boards. He had to return the test system to the manufacturer. He wants to get the case study sorted out and documented so they know how they want to use these devices. A level of uniformity is important so they can all work together and not cause issues. He explained why DVRS would not solve this issue.

Chief Davis said they have a number of mobile repeaters deployed. Once they have enough, they are going to start offering them to Canby Police. They should wait until the new system in July to implement them, right?

Ron confirmed. He emphasized the importance of them being able to set up regional frequencies so the devices can work together. He explained how this can be accomplished.

John noted that all the testing has been done with the Motorola made device. There are other manufacturers, but they haven't tested or researched those other devices.

**10. New Business (\*Action Item)**

None.

**Next Board Meeting**

Next meeting will be May 19, 2021 at 9:00AM Location: Zoom

**11. Open Agenda**

Jorge Tro introduced himself as the new Canby Police Dept. Chief Brett Smith retired.

Chief Huffman noted that this group really helps all the departments safely communicate and respond. He is grateful to be a part of this group and feels the information is very valuable.

**12. Adjournment**

Chief Jim Davis made a motion to adjourn and Chief Jorge Tro seconded.

Meeting adjourned at 10:11 AM.

**Clackamas 800 Radio Group**  
**Profit & Loss Budget vs. Actual**  
 July 2020 through May 2021

	Jul '20 - May 21	Budget	\$ Over Budget	% of Budget
<b>Ordinary Income/Expense</b>				
<b>Income</b>				
401-00 · Beginning Fund Balance	0.00	1,252,328.00	-1,252,328.00	0.0%
405-00 · Members Contracts	66,220.00	68,800.00	-2,580.00	96.3%
410-00 · Partners Fees	1,068,893.20	1,049,200.00	19,693.20	101.9%
420-00 · Partners Debt Service Zone Cont	0.00	0.00	0.00	0.0%
421-00 · Partner Debt Service Microwave	0.00	0.00	0.00	0.0%
430-00 · Subscriber Radio Payments	109,671.73	125,000.00	-15,328.27	87.7%
431-00 · Interest Income	136.78	800.00	-663.22	17.1%
435-00 · Lease Revenue	38,341.08	66,625.00	-28,283.92	57.5%
440-00 · Miscellaneous Income	251,453.00	500.00	250,953.00	50,290.6%
450-00 · Intergovernmental-Clackamas Co	7,059,697.05	15,000,000.00	-7,940,302.95	47.1%
455-00 · Bond Interest Income	0.00	0.00	0.00	0.0%
<b>Total Income</b>	<b>8,594,412.84</b>	<b>17,563,253.00</b>	<b>-8,968,840.16</b>	<b>48.9%</b>
<b>Gross Profit</b>	<b>8,594,412.84</b>	<b>17,563,253.00</b>	<b>-8,968,840.16</b>	<b>48.9%</b>
<b>Expense</b>				
605-00 · Site Rental	232,066.86	212,512.00	19,554.86	109.2%
610-00 · Fuel/Generators	19,690.27	14,625.00	5,065.27	134.6%
615-00 · HVAC Maintenance	17,471.39	22,100.00	-4,628.61	79.1%
620-00 · Landscape Maintenance	27,250.00	13,500.00	13,750.00	201.9%
621-00 · Office Supplies	0.00	1,500.00	-1,500.00	0.0%
622-00 · Bad Debt Expense	19,350.00			
625-00 · Generator Maintenance	9,958.40	25,000.00	-15,041.60	39.8%
630-00 · UPS Maintenance	2,646.00	7,500.00	-4,854.00	35.3%
635-00 · Battery Maintenance	0.00	5,000.00	-5,000.00	0.0%
645-00 · Insurance	56,584.59	50,000.00	6,584.59	113.2%
650-00 · Utilities	67,732.25	135,000.00	-67,267.75	50.2%
655-00 · Consultant Services	49,363.72	55,000.00	-5,636.28	89.8%
657-00 · Regional Radio Expense	0.00	1,500.00	-1,500.00	0.0%
660-00 · WCCCA System Fees	758,217.00	758,217.00	0.00	100.0%
665-00 · Radio Maintenance Fees	121,164.21	50,000.00	71,164.21	242.3%
670-00 · Legal Services	950.00	7,500.00	-6,550.00	12.7%
675-00 · Financial Services	6,990.00	9,500.00	-2,510.00	73.6%
680-00 · Audit Fees	6,920.00	10,000.00	-3,080.00	69.2%
683-00 · Capital Reserve	0.00	150,000.00	-150,000.00	0.0%
685-00 · Miscellaneous Expenses	708.84	7,418.00	-6,709.16	9.6%
686-00 · Meeting Expenses	100.00	2,500.00	-2,400.00	4.0%
<b>703-00 · Capital Outlay</b>				
703-01 · Buildings & Land Improvement				
703-011 · Land Improvement	5,237,146.63	0.00	5,237,146.63	100.0%
703-012 · Building	247,928.95	0.00	247,928.95	100.0%
703-013 · Tower	11,064.00	0.00	11,064.00	100.0%
703-014 · Generator	25,498.00	0.00	25,498.00	100.0%
703-01 · Buildings & Land Improvement - Other	0.00	0.00	0.00	0.0%
<b>Total 703-01 · Buildings &amp; Land Improvement</b>	<b>5,521,637.58</b>	<b>0.00</b>	<b>5,521,637.58</b>	<b>100.0%</b>
<b>703-02 · Radio Backbone</b>				
703-021 · Simulcast / Master Site	1,148,432.88	0.00	1,148,432.88	100.0%
703-022 · Subscriber Radios	372,098.84	0.00	372,098.84	100.0%
703-023 · Console Equipment	13,617.44			
703-024 · Paging	59,934.19			
703-026 · Cat. 6 Fire Station Alerting	180,282.15			
<b>Total 703-02 · Radio Backbone</b>	<b>1,774,365.50</b>	<b>0.00</b>	<b>1,774,365.50</b>	<b>100.0%</b>
<b>703-03 · Equipment</b>				
703-031 · Security System	164.68			
703-032 · DC Power	44,658.73	0.00	44,658.73	100.0%
703-034 · Microwave	266,515.97	0.00	266,515.97	100.0%
703-03 · Equipment - Other	0.00	0.00	0.00	0.0%
<b>Total 703-03 · Equipment</b>	<b>311,339.38</b>	<b>0.00</b>	<b>311,339.38</b>	<b>100.0%</b>
<b>703-04 · Capital Outlay Service</b>	<b>13,233.16</b>	<b>0.00</b>	<b>13,233.16</b>	<b>100.0%</b>
<b>703-00 · Capital Outlay - Other</b>	<b>0.00</b>	<b>15,800,000.00</b>	<b>-15,800,000.00</b>	<b>0.0%</b>
<b>Total 703-00 · Capital Outlay</b>	<b>7,620,575.62</b>	<b>15,800,000.00</b>	<b>-8,179,424.38</b>	<b>48.2%</b>

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06/07/21

Accrual Basis

**Clackamas 800 Radio Group**  
**Profit & Loss Budget vs. Actual**  
 July 2020 through May 2021

	Jul '20 - May 21	Budget	\$ Over Budget	% of Budget
795-00 · Debt Service	0.00	0.00	0.00	0.0%
800-00 · Operating Contingency	0.00	100,000.00	-100,000.00	0.0%
999-00 · Unappropriated End Fund Bal	0.00	124,881.00	-124,881.00	0.0%
<b>Total Expense</b>	<b>9,017,739.15</b>	<b>17,563,253.00</b>	<b>-8,545,513.85</b>	<b>51.3%</b>
<b>Net Ordinary Income</b>	<b>-423,326.31</b>	<b>0.00</b>	<b>-423,326.31</b>	<b>100.0%</b>
<b>Net Income</b>	<b>-423,326.31</b>	<b>0.00</b>	<b>-423,326.31</b>	<b>100.0%</b>



# Clackamas 800 Radio Group Profit & Loss Detail

May 2021

Type	Date	Num	Name	Memo	Class	Amount	Balance
<b>Ordinary Income/Expense</b>							
<b>Income</b>							
<b>431-00 · Interest Income</b>							
Deposit	05/31/2021			Interest		12.34	12.34
Total 431-00 · Interest Income						12.34	12.34
<b>435-00 · Lease Revenue</b>							
Deposit	05/24/2021		FBI	Deposit		130.00	130.00
Deposit	05/24/2021		FBI	Deposit		130.00	260.00
Deposit	05/24/2021		FBI	Deposit		130.00	390.00
Total 435-00 · Lease Revenue						390.00	390.00
<b>450-00 · Intergovernmental-Clackamas Co</b>							
Deposit	05/24/2021		Clackamas County - Bond Related	For April expenditures		535,893.46	535,893.46
Total 450-00 · Intergovernmental-Clackamas Co						535,893.46	535,893.46
Total Income						536,295.80	536,295.80
Gross Profit						536,295.80	536,295.80
<b>Expense</b>							
<b>605-00 · Site Rental</b>							
Bill	05/31/2021		Focus Commercial, Inc.			1,195.00	1,195.00
Total 605-00 · Site Rental						1,195.00	1,195.00
<b>610-00 · Fuel/Generators</b>							
Bill	05/01/2021	INV01...	WCCCA			3,470.55	3,470.55
Total 610-00 · Fuel/Generators						3,470.55	3,470.55
<b>615-00 · HVAC Maintenance</b>							
Bill	05/10/2021	163901	Hunter-Davisson, Inc.			340.00	340.00
Bill	05/10/2021	163902	Hunter-Davisson, Inc.			340.00	680.00
Bill	05/13/2021	164004	Hunter-Davisson, Inc.			340.00	1,020.00
Bill	05/13/2021	164005	Hunter-Davisson, Inc.			340.00	1,360.00
Bill	05/13/2021	164019	Hunter-Davisson, Inc.			340.00	1,700.00
Bill	05/13/2021	164020	Hunter-Davisson, Inc.			340.00	2,040.00
Total 615-00 · HVAC Maintenance						2,040.00	2,040.00
<b>645-00 · Insurance</b>							
Deposit	05/11/2021	060820	Special Districts Insurance Services	Liability Insurance Refund		-706.00	-706.00
Total 645-00 · Insurance						-706.00	-706.00
<b>650-00 · Utilities</b>							
Check	05/04/2021	EFT	PGE			334.36	334.36
Check	05/04/2021	EFT	PGE			430.44	764.80
Check	05/05/2021	EFT	PGE			32.88	797.68
Check	05/06/2021	EFT	PGE			171.08	968.76
Check	05/07/2021	EFT	PGE			173.81	1,142.57
Check	05/07/2021	EFT	PGE			504.22	1,646.79
Check	05/10/2021	EFT	PGE			218.81	1,865.60
Check	05/11/2021	EFT	PGE			430.87	2,296.47
Check	05/12/2021	EFT	NW Natural			15.99	2,312.46
Check	05/13/2021	EFT	PGE			312.75	2,625.21
Check	05/14/2021	EFT	Comcast			128.35	2,753.56
Check	05/18/2021	EFT	PGE			474.07	3,227.63
Check	05/19/2021	EFT	PGE			124.87	3,352.50
Check	05/19/2021	EFT	PGE			206.88	3,559.38
Check	05/19/2021	EFT	PGE			349.07	3,908.45
Check	05/19/2021	EFT	PGE			481.63	4,390.08
Check	05/19/2021	EFT	PGE			602.41	4,992.49
Check	05/20/2021	EFT	PGE			177.32	5,169.81
Check	05/21/2021	EFT	PGE			552.07	5,721.88
Check	05/25/2021	EFT	PGE			204.17	5,926.05
Check	05/25/2021	EFT	PGE			551.35	6,477.40
Check	05/28/2021	EFT	Canby Utility	190236		123.24	6,600.64
Total 650-00 · Utilities						6,600.64	6,600.64
<b>655-00 · Consultant Services</b>							
Bill	05/31/2021	21531	Hartsock Project Mgmt.			4,364.13	4,364.13
Total 655-00 · Consultant Services						4,364.13	4,364.13
<b>665-00 · Radio Maintenance Fees</b>							
Bill	05/01/2021	36179	Superior Fence & Construction			1,490.00	1,490.00
Total 665-00 · Radio Maintenance Fees						1,490.00	1,490.00
<b>675-00 · Financial Services</b>							
Bill	05/05/2021	161391	Talbot, Korvola & Warwick, LLP			515.00	515.00
Check	05/31/2021			Service Charge		20.00	535.00
Bill	05/31/2021	161451	Talbot, Korvola & Warwick, LLP			515.00	1,050.00
Total 675-00 · Financial Services						1,050.00	1,050.00

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06/07/21

Accrual Basis

# Clackamas 800 Radio Group Profit & Loss Detail

May 2021

Type	Date	Num	Name	Memo	Class	Amount	Balance
<b>703-00 · Capital Outlay</b>							
<b>703-01 · Buildings &amp; Land Improvement</b>							
<b>703-011 · Land Improvement</b>							
Bill	05/22/2021	9601	Securasite LLC		40 All	1,252.65	1,252.65
Bill	05/22/2021	9602	Securasite LLC		40 All	6,125.00	7,377.65
Bill	05/22/2021	9604	Securasite LLC		40 All	240.70	7,618.35
Bill	05/22/2021	9603	Securasite LLC		40 All	3,581.25	11,199.60
Bill	05/31/2021	5515	T3 Construction LLC		20 Angel Falls/...	25,000.00	36,199.60
Bill	05/31/2021	5514	T3 Construction LLC		21 Oak Grove B...	40,000.00	76,199.60
Bill	05/31/2021	5511	T3 Construction LLC		22 Whale Head	254,603.14	330,802.74
Bill	05/31/2021	5512	T3 Construction LLC		22 Whale Head	52,500.00	383,302.74
Bill	05/31/2021	5513	T3 Construction LLC		22 Whale Head	45,000.00	428,302.74
Total 703-011 · Land Improvement						428,302.74	428,302.74
<b>703-012 · Building</b>							
Bill	05/18/2021	INV01...	WCCCA		40 All	2,674.67	2,674.67
Total 703-012 · Building						2,674.67	2,674.67
<b>703-013 · Tower</b>							
Bill	05/01/2021	INV67...	Day Wireless Systems Inc.		40 All	1,554.00	1,554.00
Total 703-013 · Tower						1,554.00	1,554.00
Total 703-01 · Buildings & Land Improvement						432,531.41	432,531.41
<b>703-02 · Radio Backbone</b>							
<b>703-021 · Simulcast / Master Site</b>							
Bill	05/01/2021	302696	Central Square Technologies		40 All	4,320.16	4,320.16
Bill	05/01/2021	7808	GenCore Candeo Ltd		40 All	27,500.00	31,820.16
Bill	05/01/2021	INV01...	WCCCA		40 All	546.15	32,366.31
Bill	05/31/2021		Redefyne Moving		40 All	2,500.00	34,866.31
Total 703-021 · Simulcast / Master Site						34,866.31	34,866.31
<b>703-022 · Subscriber Radios</b>							
Bill	05/01/2021	82811...	Motorola Solutions		40 All	1,635.20	1,635.20
Bill	05/07/2021	11870...	Motorola Solutions		40 All	55,548.16	57,183.36
Total 703-022 · Subscriber Radios						57,183.36	57,183.36
Total 703-02 · Radio Backbone						92,049.67	92,049.67
<b>703-03 · Equipment</b>							
<b>703-034 · Microwave</b>							
Bill	05/28/2021	1892776	Microwave Networks Inc.		05 Mount Scott	38,312.00	38,312.00
Total 703-034 · Microwave						38,312.00	38,312.00
Total 703-03 · Equipment						38,312.00	38,312.00
Total 703-00 · Capital Outlay						562,893.08	562,893.08
Total Expense						582,397.40	582,397.40
Net Ordinary Income						-46,101.60	-46,101.60
<b>Net Income</b>						<b>-46,101.60</b>	<b>-46,101.60</b>

## Clackamas 800 Radio Group

## Trial Balance

As of May 31, 2021

	May 31, 21	
	Debit	Credit
115-00 · Cash/Checking Account	1,528,648.29	
11000 · Accounts Receivable	122,734.39	
120-00 · Member Fees Receivable	0.00	
12000 · Undeposited Funds	0.00	
150-00 · Prepaid Expenses	0.00	
169-00 · CIP	44,120,952.67	
160-00 · Buildings and Towers	10,956,645.15	
165-00 · Radio Backbone	2,520,898.80	
166-00 · Equipment	1,052,983.00	
167-00 · Work In Progress	0.00	
175-00 · Accumulated Depreciation		11,582,838.71
180-00 · Deferred O/F-P25 Maintenance	5,812,058.44	
201-00 · Accounts Payable		587,913.06
201-02 · Other Accounts Payable	0.00	
202-00 · Partner Prepayment		2,817.05
250-00 · N/P - CCB (Microwave)	0.00	
210-00 · Reimb due Clackamas County	0.00	
300-01 · GLTDAG	0.00	
300-00 · Fund Balance	0.00	
310-00 · Investment in Fixed Assets		47,068,640.91
320-00 · Retained Earnings, Prior		7,296,037.32
405-00 · Members Contracts		66,220.00
410-00 · Partners Fees		1,068,893.20
420-00 · Partners Debt Service Zone Cont	0.00	
430-00 · Subscriber Radio Payments		109,671.73
431-00 · Interest Income		136.78
435-00 · Lease Revenue		38,341.08
440-00 · Miscellaneous Income		251,453.00
450-00 · Intergovernmental-Clackamas Co		7,059,697.05
605-00 · Site Rental	232,066.86	
610-00 · Fuel/Generators	19,690.27	
615-00 · HVAC Maintenance	17,471.39	
620-00 · Landscape Maintenance	27,250.00	
622-00 · Bad Debt Expense	19,350.00	
625-00 · Generator Maintenance	9,958.40	
630-00 · UPS Maintenance	2,646.00	
645-00 · Insurance	56,584.59	
650-00 · Utilities	67,732.25	
655-00 · Consultant Services	49,363.72	
660-00 · WCCCA System Fees	758,217.00	
665-00 · Radio Maintenance Fees	121,164.21	
670-00 · Legal Services	950.00	
675-00 · Financial Services	6,990.00	
680-00 · Audit Fees	6,920.00	
685-00 · Miscellaneous Expenses	708.84	
686-00 · Meeting Expenses	100.00	
703-011 · Land Improvement	5,237,146.63	
703-012 · Building	247,928.95	
703-013 · Tower	11,064.00	
703-014 · Generator	25,498.00	
703-021 · Simulcast / Master Site	1,148,432.88	
703-022 · Subscriber Radios	372,098.84	
703-023 · Console Equipment	13,617.44	
703-024 · Paging	59,934.19	
703-026 · Cat. 6 Fire Station Alerting	180,282.15	
703-031 · Security System	164.68	
703-032 · DC Power	44,658.73	
703-034 · Microwave	266,515.97	
703-04 · Capital Outlay Service	13,233.16	
<b>TOTAL</b>	<b>75,132,659.89</b>	<b>75,132,659.89</b>

## Clackamas 800 Radio Group

## Balance Sheet

As of May 31, 2021

	May 31, 21
<b>ASSETS</b>	
<b>Current Assets</b>	
Checking/Savings	
115-00 · Cash/Checking Account	1,528,648.29
<b>Total Checking/Savings</b>	1,528,648.29
Accounts Receivable	
11000 · Accounts Receivable	122,734.39
<b>Total Accounts Receivable</b>	122,734.39
<b>Total Current Assets</b>	1,651,382.68
<b>Fixed Assets</b>	
169-00 · CIP	44,120,952.67
160-00 · Buildings and Towers	10,956,645.15
165-00 · Radio Backbone	2,520,898.80
166-00 · Equipment	1,052,983.00
175-00 · Accumulated Depreciation	-11,582,838.71
<b>Total Fixed Assets</b>	47,068,640.91
<b>Other Assets</b>	
180-00 · Deferred O/F-P25 Maintenance	5,812,058.44
<b>Total Other Assets</b>	5,812,058.44
<b>TOTAL ASSETS</b>	<b>54,532,082.03</b>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
Accounts Payable	
201-00 · Accounts Payable	587,913.06
<b>Total Accounts Payable</b>	587,913.06
<b>Other Current Liabilities</b>	
202-00 · Partner Prepayment	2,817.05
<b>Total Other Current Liabilities</b>	2,817.05
<b>Total Current Liabilities</b>	590,730.11
<b>Total Liabilities</b>	590,730.11
<b>Equity</b>	
310-00 · Investment in Fixed Assets	47,068,640.91
320-00 · Retained Earnings, Prior	7,296,037.32
Net Income	-423,326.31
<b>Total Equity</b>	53,941,351.92
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>54,532,082.03</b>

12:16 PM

06/07/21

## Clackamas 800 Radio Group

## A/R Aging Detail

As of May 31, 2021

	Type	Date	Num	Name	Due Date	Aging	Open Balance
<b>Current</b>							
Total Current							
<b>1 - 30</b>							
Total 1 - 30							
<b>31 - 60</b>							
Total 31 - 60							
<b>61 - 90</b>							
Total 61 - 90							
<b>&gt; 90</b>							
	Invoice	07/31/2020	19-269	Colton Fire	08/30/2020	274	1,770.00
	Invoice	10/29/2020	19-313	Canby FD	10/29/2020	214	104,409.39
	Invoice	01/05/2021	19-319	Colton Fire	01/05/2021	146	12,577.50
	Invoice	01/05/2021	19-320	Colton Fire	01/05/2021	146	3,977.50
Total > 90							122,734.39
<b>TOTAL</b>							<b>122,734.39</b>



# RADIO PROJECT STATUS

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## Emergency Communication System Upgrade

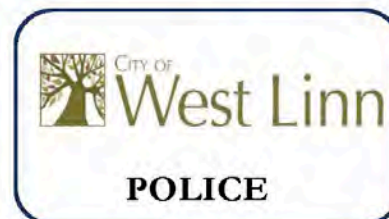
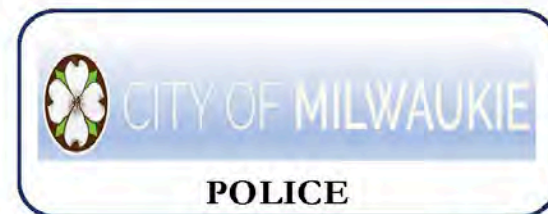
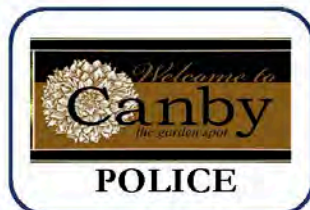
C800 Project Leader: John Hartsock

WCCCA Project Leader: Ron Polluconi

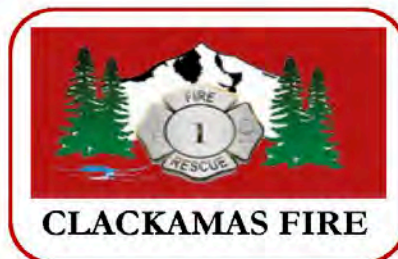
C800 Project Manager: Bjorn Morfin

Date: April 21, 2021





## THE EIGHTEEN PUBLIC SAFETY AGENCIES THAT MAKE UP CLACKAMAS 800 RADIO GROUP

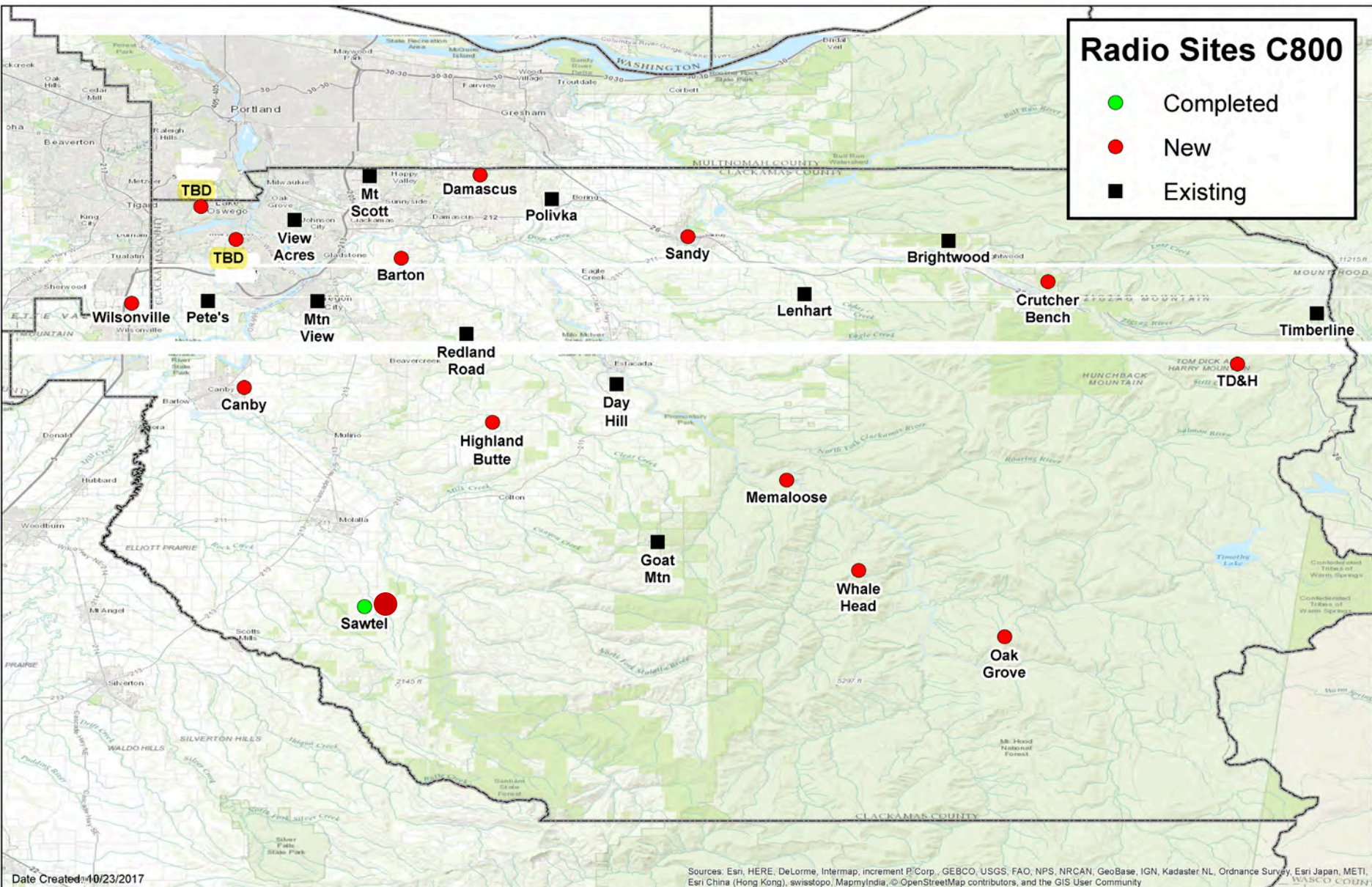




# C800 Site Locations

## Radio Sites C800

- Completed
- New
- Existing



# Project Status Existing Sites Summary

## 12 Existing Radio Sites Design - Construction // 2 Existing Dispatch Centers

- **Brightwood / Day Hill / Lenhart / Mt. Scott / Mt. View / Pete's / Polivka / Redland Rd / Sawtell / View Acres / Goat Mtn :** Complete
- **Timberline:** new generator and 1,000-gal fuel tank to be scheduled
- **CCOM:** New Uninterruptable Power System for Master Site Equipment / revisions to fire suppression system / new cable tray work complete. Replacement of console furniture complete. Installation of dispatch floor ground ring complete. New radio consoles complete.
- **LOCOM:** New console furniture, console radios and move to new facility – complete



# Project Status New Sites Summary

## 14 New Sites Acquisition / Design / Construction:

- **Barton / Canby / Crutcher Bench / Damascus / Highland Butte / Hoodland Fire / Sandy / Wilsonville** : Complete.
- **Tom Dick & Harry / Memaloose / Whale Head / Oak Grove (USFS):**
  - Memaloose** – Construction complete – fire damage / waiting for completion of utility power – anticipate June 2021 due to access / weather
  - Whalehead** – Construction complete – fire damage / waiting for completion of utility power – anticipate June 2021 due to access / weather
  - Oak Grove** – Construction 50% complete – turn over August 2021 due to access / weather.
  - TD&H** - Anticipate construction start June 2021 complete August
- **Two Sites for Lake Oswego / West Linn area** - for in-building coverage - on hold for more research and public meeting



# Project Schedule

- Existing Sites Upgrade complete
- New Site Design & Construction Complete / Except for HWY 224 sites – anticipate July 2021 and Tom Dick & Harry anticipate August 2021 / Lake Oswego - TBD
- System Operational Date: August 2021
- System Complete: December 2021
- Lake Oswego in building coverage sites – To Be Determined





# Q3 - 2021 Quarterly Outlook

	C800
<ul style="list-style-type: none"><li>• Procurement</li></ul>	<ul style="list-style-type: none"><li>• Complete</li></ul>
<ul style="list-style-type: none"><li>• Leases &amp; Land Use Applications</li></ul>	<ul style="list-style-type: none"><li>• Lake Oswego sites</li></ul>
<ul style="list-style-type: none"><li>• Site Construction</li></ul>	<ul style="list-style-type: none"><li>• Memaloose / Whalehead / Oak Grove Butte / Goat Mt / Tom Dick &amp; Harry</li></ul>
<ul style="list-style-type: none"><li>• Radio / Microwave</li></ul>	<ul style="list-style-type: none"><li>• Continue radio infrastructure install</li><li>• Continue microwave system install</li><li>• Continue radio coverage testing</li><li>• Finalize subscriber radio distribution and existing radio upgrades</li></ul>

# C800 Radio System Upgrade Budget <sup>(1)</sup>

Project:	<b>C800 Radio System Upgrade</b>		
Date Original:	10/1/2015	Date Updated:	<b>June 1, 2021</b>
Project Manager:	Bjorn Morfin		

Item	Budget	Original Encumbrance	Additional Encumbrance / Change Order	Estimate to Complete	Percent Complete	Estimated Total	(Over) Under Budget	Expended
<b>Soft Cost</b>								
Site Acquisition Consulting - Quest	60,000	25,000	45,000	(2,930)	100.00%	67,070	(7,070)	67,069.81
Site Acquisition Consulting / Permits - Securasite	320,000	321,250	293,654	0	91.04%	614,904	(294,904)	559,834.19
Site Planning A&E - Cushing/Capital/Cundiff/Forensic/KPFF/SD C/ToddHess	725,000	692,391	468,930	(230,000)	98.46%	931,321	(206,321)	917,006.70
Geotechnical / Environmental Consulting - Black Mtn	250,000	443,670	60,000	0	98.58%	503,670	(253,670)	496,515.22
Survey - McKay	75,000	129,835	0	0	90.99%	129,835	(54,835)	118,135.00
USFS Land Use Fees	15,000	10,000	40,000	5,000	89.94%	55,000	(40,000)	49,465.23
Land Use Fees	25,000	9,400	0	0	99.35%	9,400	15,600	9,339.00
Plan Check / Permit Cost	60,000	10,000	0	0	95.25%	10,000	50,000	9,525.20
Printing	2,500	0	0	500	0.00%	500	2,000	0.00
Bid Advertising	3,500	1,300	0	250	92.22%	1,550	1,950	1,429.43
Testing & Inspection (In Site Const)	40,000	2,700	0	0	97.18%	2,700	37,300	2,623.75
Project Management	300,000	384,000	325,000	0	96.41%	709,000	(409,000)	683,536.70
Legal Fees	30,000	21,000	0	5,000	80.92%	26,000	4,000	21,038.74
Licensing	20,000	69,000	0	5,000	93.10%	74,000	(54,000)	68,890.50
Miscellaneous	30,000	88,000	25,000	2,000	96.93%	115,000	(85,000)	111,465.38
<b>Sub-Total Soft Cost</b>	<b>1,956,000</b>	<b>2,207,546</b>	<b>1,257,584</b>	<b>(215,180)</b>	<b>95.87%</b>	<b>3,249,950</b>	<b>(1,293,950)</b>	<b>3,115,875</b>
<b>Construction Cost</b>								
Site Construction	8,895,000	12,596,753	5,400,000	500,000	95.93%	18,496,753	(9,601,753)	17,743,511.52
Buildings	1,350,000	2,018,663	19,000	0	99.99%	2,037,663	(687,663)	2,037,374.27
Towers	660,000	1,383,357	253,000	0	99.99%	1,636,357	(976,357)	1,636,147.31
Generator	500,000	513,196	150,000	20,000	96.66%	683,196	(183,196)	660,374.31
48VDC	1,065,000	1,443,767	0	0	91.00%	1,443,767	(378,767)	1,313,892.45
Lake Oswego Antenna	18,000	17,500	0	0	100.07%	17,500	500	17,511.75
<b>Sub-Total Construction Cost</b>	<b>12,488,000</b>	<b>17,973,236</b>	<b>5,822,000</b>	<b>520,000</b>	<b>96.27%</b>	<b>24,315,236</b>	<b>(11,827,236)</b>	<b>23,408,811.61</b>

# C800 Radio System Upgrade Budget (2)

Project:	<b>C800 Radio System Upgrade</b>		
Date Original:	10/1/2015	Date Updated:	June 1, 2021
Project Manager:	Bjorn Morfin		

Item	Budget	Original Encumbrance	Additional Encumbrance / Change Order	Estimate to Complete	Percent Complete	Estimated Total	(Over) Under Budget	Expended
<b>Equipment Costs</b>								
Simulcast Equipment	20,726,000	19,993,440	2,672,000	0	88.43%	22,665,440	(1,939,440)	20,042,728.97
Paging	373,000	269,228	50,000	75,000	95.27%	394,228	(21,228)	375,568.01
Subscriber Radios	5,000,000	9,409,958	295,032	(5,000,000)	79.53%	4,704,990	295,010	3,742,065.56
Asset Management	119,000	203,197		25,000	0.00%	228,197	(109,197)	0.00
Post Warranty / System Refresh	5,800,000	5,812,058		0	100.00%	5,812,058	(12,058)	5,812,058.44
Test Equipment	100,000			100,000	0.00%	100,000	0	0.00
Microwave	3,368,000	2,671,467	600,000	75,000	96.32%	3,346,467	21,533	3,223,345.91
Security System	1,364,000	440,540		50,000	2.74%	490,540	873,460	13,420.14
Fire Station Alerting	0	1,697,407	43,000	0	99.87%	1,740,407	(1,740,407)	1,738,143.84
<b>Subtotal Equipment Costs</b>	<b>36,850,000</b>	<b>40,497,295</b>	<b>3,660,032</b>	<b>(4,675,000)</b>	<b>88.51%</b>	<b>39,482,327</b>	<b>(2,632,327)</b>	<b>34,947,331</b>
Bond Cost	300,000	290,372	33,200	0	104.08%	323,572	(23,572)	336,781
<b>Subtotal Project Cost</b>	<b>51,594,000</b>	<b>60,968,448</b>	<b>10,772,816</b>	<b>(4,370,180)</b>	<b>91.74%</b>	<b>67,371,084</b>	<b>(15,777,084)</b>	<b>61,808,798</b>
<b>Additional Proceeds</b>	<b>6,528,981</b>						<b>6,528,981</b>	
<b>Adjusted Project Costs</b>	<b>58,122,981</b>	<b>60,968,448</b>	<b>10,772,816</b>	<b>(4,370,180)</b>	<b>91.74%</b>	<b>67,371,084</b>	<b>(9,248,103)</b>	
<b>Contingency</b>	<b>7,406,000</b>						<b>7,406,000</b>	
<b>Total Project Cost</b>	<b>65,528,981</b>	<b>60,968,448</b>	<b>10,772,816</b>	<b>(4,370,180)</b>	<b>91.74%</b>	<b>67,371,084</b>	<b>(1,842,103)</b>	<b>61,808,797.92</b>

<b>Bond Proceeds</b>	5,845,000	Taxable
	53,155,000	Non Taxable
	<b>59,000,000</b>	
<b>Additional Proceeds</b>	3,853,981	Subscriber Radio Payments
	2,675,000	PGE Payment
	<b>6,528,981</b>	
<b>Total Proceeds</b>	<b>65,528,981</b>	

<b>Premium Bond Proceeds</b>	<b>7,165,794</b>
<b>Interest Income</b>	<b>1,032,112</b>
<b>Additional Funds</b>	<b>8,197,906</b>
<b>County oversight fees</b>	<b>(100,000)</b>
<b>Total Available</b>	<b>8,097,906</b>
<b>Draw Feb 18, 2021</b>	<b>(4,500,000)</b>
<b>Balance</b>	<b>3,597,906</b>

# Project Goal:

To create an efficient, dependable public safety radio communications system that works in all parts of Clackamas County!





## Oak Grove Butte Foundations





## Whalehead Power Boring Hwy 224





11300 SE Fuller Rd  
Milwaukie, Oregon 97222  
(503) 780-4806

## Board of Directors Action Request

**To:** C800 Board of Directors  
**From:** John Hartsock, Manager  
**Date:** June 16, 2021  
**Re:** Approve a Grant Request to Oregon Department of Forestry

**REQUEST:** It is hereby requested that the C800 Board of Directors approve a grant request in the amount of \$237,570 to Oregon Department of Forestry for the design and implementation of a five site 150Mhz VHF overlay for law enforcement and fire interoperable communication in south Clackamas County.

### **BACKGROUND:**

On April 13<sup>th</sup>, C800 received a notice from County Disaster Management regarding a very short notice communication grant opportunity through the Oregon Department of Forestry (ODF), relating to House Bill 5042 which appropriated money for the biennium ending June 30, 2021 in the amount of \$1,500,000.

Due to the abbreviated funding cycle, one-page grant applications were due on April 23<sup>rd</sup> and were submitted by Clackamas County Disaster Management to ODF. Two applications were submitted by C-COM for remote dispatching kits (value \$74,500 each for \$149K total) and by C800 Radio Group for VHF radio equipment (value \$186,250).

Both CCOM and C800 were notified of selection on 5/5/21 and received a copy of the CCOM contract from ODF on 5/25/21. ODF decided to provide CCOM with \$298K towards the procurement of four (4) remote dispatching kits to support future evacuations. Further ODF increased the C800 grant to \$237,570 for additional radios.

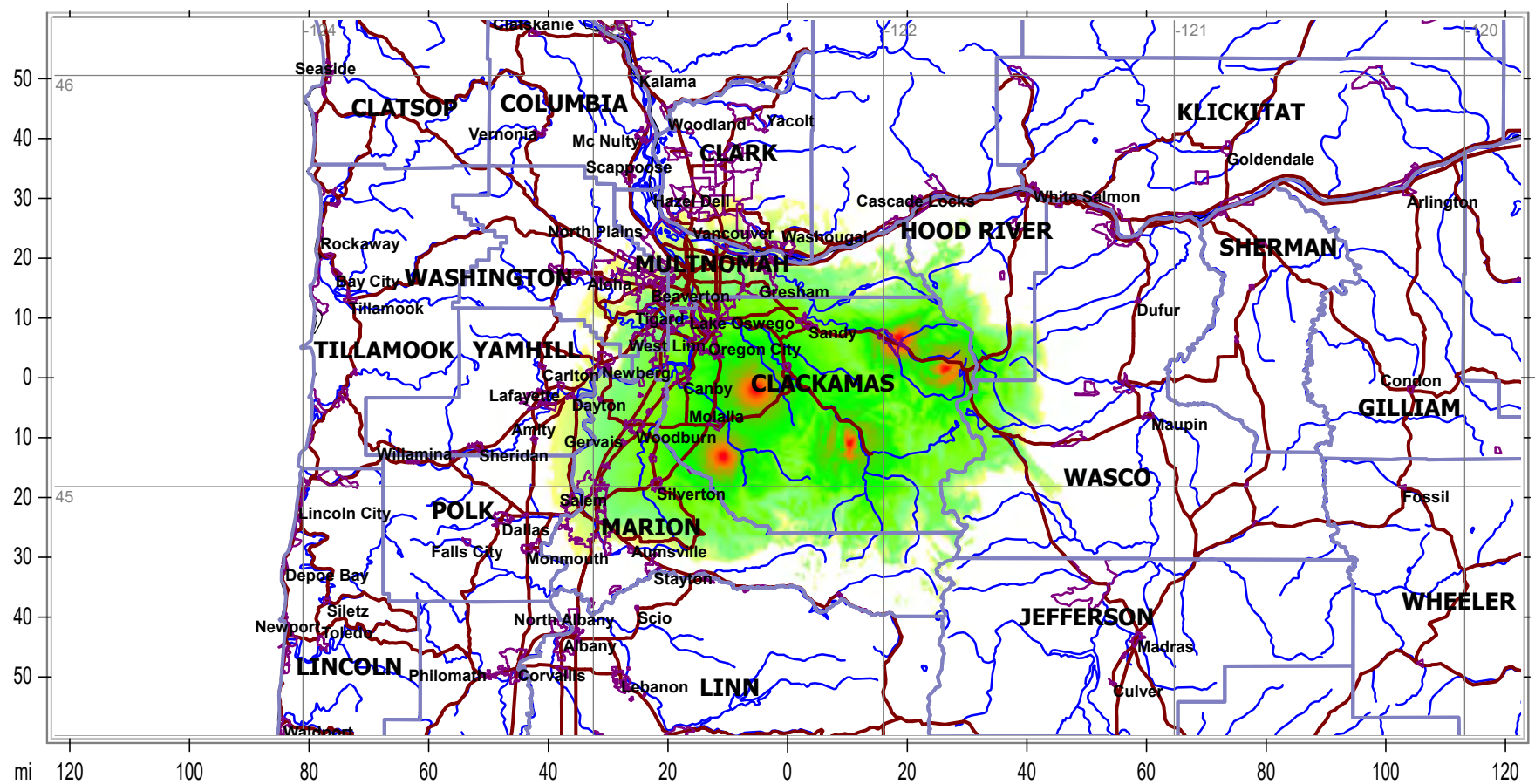
**POLICY IMPLICATIONS:** None

**FINANCIAL:** A supplemental budget will be prepared to expend and request reimbursement for use of these funds within the grant timelines.

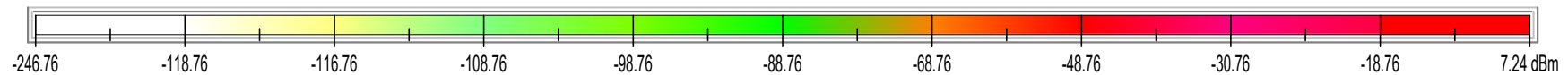
**LEGAL:** A C800 purchase order will be utilized as approved by legal counsel.

**RECOMMENDATION:** It is hereby recommended that the C800 Board of Directors approve a grant request in the amount of \$237,570 to Oregon Department of Forestry for the design and implementation of a five site 150Mhz VHF overlay for law enforcement and fire interoperable communication in south Clackamas County.

RX Antenna Top TX antenna Mid 6 dB system gain 1 deg DT



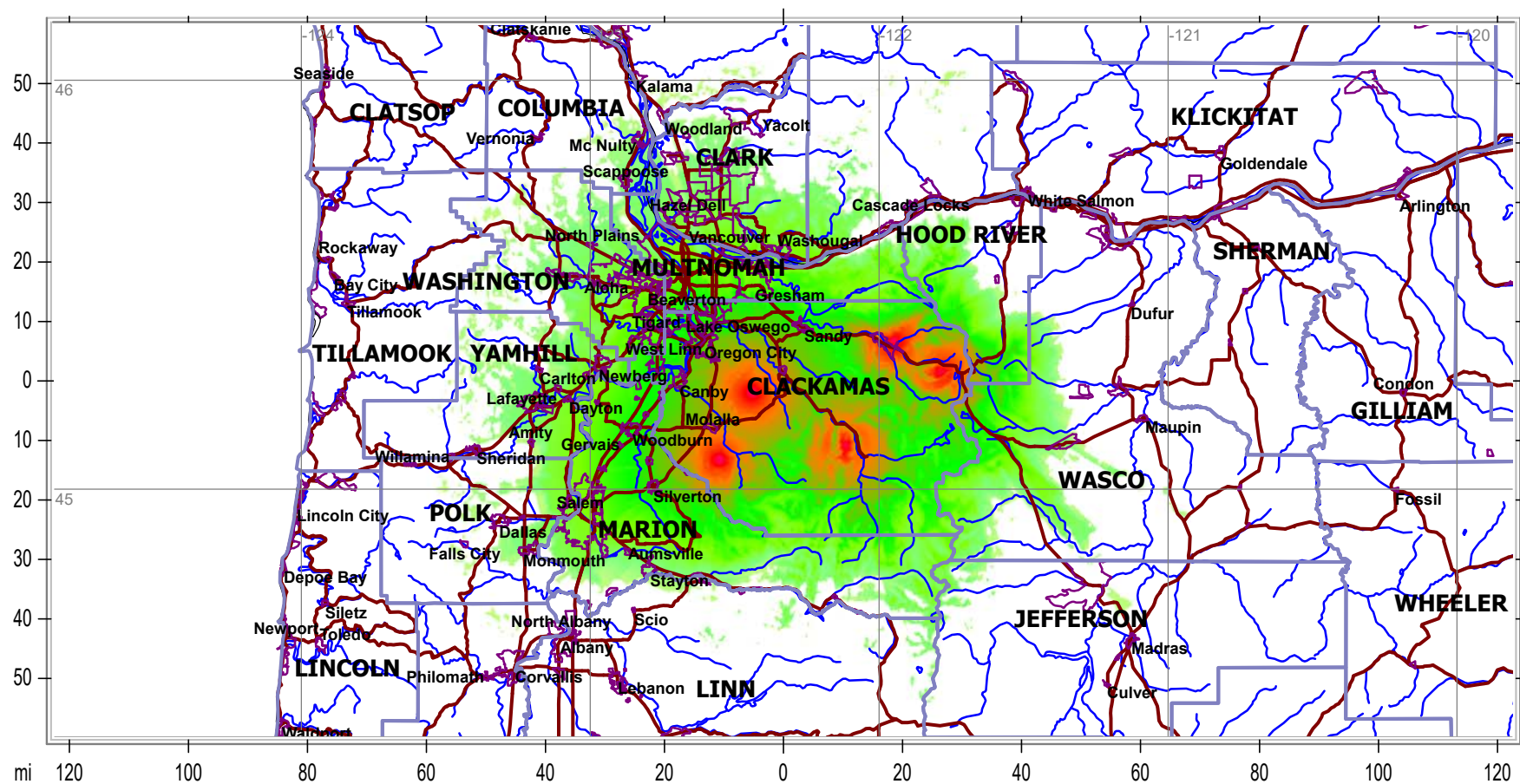
Talk Out to Portabel with -6 dB on the Hip @ 5 Watts



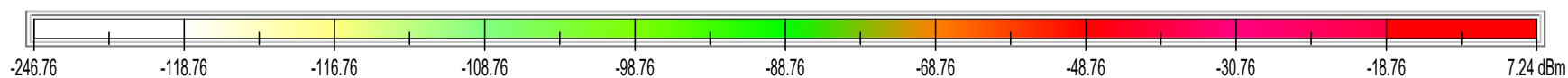
County Borders   State Borders   City Borders   Highways   Water Features   Lat/Lon Grid



RX Antenna Top TX antenna Mid 6 dB system gain 1 deg DT



Talk Out to Mobile with 2 dB on the Roof @ 35 Watts



County Borders   State Borders   City Borders   Highways   Water Features   Lat/Lon Grid



# Factory Mutual Timeline

## Devices (Astro & PCR)

- Factory Mutual Retired the FM3610-88 Standard in 2012. Proposed new standard was not accepted by Industry.
- TIA-4950 was Identified as the New Standard for HAZLOC Required Products
- Shipment of FM3610-88 Certified Products Ended in Dec 2015.
- New TIA-4950 Products Ship as the New HAZLOC product. UL Provides Testing / Certification to the TIA Standard.



Motorola initiates production and shipment of TIA-4950 Certified Radios

Current Shipping / Service

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

FM3610-88 Expired in 2012. No longer able to certify New Radios to this Standard

Motorola stops production of FM3610-88 Certified Radios (Dec 2015)

5 Years +

Motorola announces the change of Service to the FM3610-88 certified radios. (**March 2021**)

- Return Unrepaired
- Repair with FM Labels Removed

