INCIDENT ACTION PLAN

MUCKAMUCK FIRE

Tuesday, September 7, 2021 0700-1900 Operational Period

PERCENT OF EFFORT

Ground	Daily	Approval
DNR	%	
USFS	%	
BLM	%	

Air	Daily	Approval
DNR	%	
USFS	%	
BLM	%	



WA-COF-2290 221-KTR P6 N75D - 0621



		4 1 11 11		l
	Incident Objectives	1. Incident Name	2. Date Prepared	3. Time Prepared
		Muckamuck	9/6/2021	1800
4.	Operational Period (Date and Ti			
_	9/7/2021	0700-1900		
5.	General Control Objectives for t	he Incident (include Alternativ	es)	
	 Implement risk management the public 	practices that provide for the	safety of firefighters, ot	her responders, and
	 Establish control line in areas exposures are commensurate 	where there is a high probabie with expected benefits.	lity of success and ensu	re that firefighters
	 Conduct suppression repair a damage to resources. 	ctivities in conjunction with re	source advisors to prev	ent long term
	 Foster good relationships wit accurate and timely informat 	h local cooperators, stakehold ion.	ers and the public by pr	oviding coordinated,
	 Keep cost commensurate with Agency Administrators and Ir 	ch values at risk by working wit ncident Business Advisor.	h local unit and coordin	ating with the
		s assigned to the fire in a man nment to strengthen relations		itive and
11	 Utilize the Best Management fighters. 	Practices to reduce the sprea	d of COVID-19 to the co	mmunity and fire
6.	Weather Forecast for Operation	al Period		
	See attached weather foreca	st.		
7.	General Safety Message			
	 Provide for firefighter and 	public safety at all times.		
	 Monitor compliance of 10 	and 18 by all incident perso	onnel.	
	• Adhere to 2:1 work/rest ra	atio for all fire line personne	el.	
	 Aviation safety is high price 	ority. Assess the risk against	t the benefit of the mi	ssion.
	 Ensure all assigned persor 	nnel understand emergency	medical reporting & t	ransport
8.	Attachments (check if attached			
Г	☑ Organization List (ICS 203)	☑ Assignment List (ICS 204)	☑ Air Operat	tions (ICS 220)
	☑ Weather	 ☑ Communication Plan (ICS 2 	Security (Section) to a disconsistant	AND ADMIT AREA OF THE PARTY OF
-	☑ Safety Message	☑ Medical Plan (ICS 206)	☑ Incident N	1aps
_	9. Prepare	d by (PSC)	10. Approved by (IC)	
	ICS-202	a E Plummu	06	

ORGANIZATION A	SSIGNMENT LIST		
1. Incident Name	Muckamuck	9. OPERATIONS SEC	TION
2. Date 9/6/2021	3. Time 1800	Field	Josh Tellessen
4. Operational Period	9/7/2021 0700-1900	Planning	Shane Robson
5. INCIDENT COMMAN	NDER & STAFF	b. Division C	
Incident Commander	Bill Dennstaedt	Division Supervisor	Tim Love
		Deputy	
Safety Officer	Bob Schwiesow	d. Division F	
		Division Supervisor	Doug Dodson
Information Officer	Don Malone	Deputy	
6. AGENCY REPRESEN	TATIVE	d. Division X	
Agency	Name	Division Supervisor	Max Leyva
USFS AA	Kathy Johnson	Deputy	
DNR AA	Pat Ryan	d. Roads/Repair G	roup
BLM AREP	Chris Sheridan	Division Supervisor	Brian Pratt
BOR AREP	Kendra Fallon	Deputy	
Okanogan FD 9	Tim Tugaw	10. FINANCE SECTION	ON
Okanogan DEM	Maurice Goodall	Chief	Cari Richardson
REAF	Mark Dean	Deputy	Michelle Leonard
REAF	Matt Quinn	Time Unit	
7. PLANNING SECTION	V	11. CONTACTS / OT	HER INFORMATION
Chief	Debbie Plummer	NEWICC 509.685.6900	Fax 509.685.6918
GISS (T)	Willa Zyskowski		
ITSS	Bradley Dilg		
8. LOGISTICS SECTION			
Chief	Matt Lougy		
Deputy	Mike Bucy	Prepared by (Resource	Unit Leader)
Basecamp Manager	Mark Williams	De	ebbie Plummer, PSC3
Spike Camp Manager	Paul Footen		
Communications	Todd Bellfueille		

ICS-203

	DIVISION ASSIG	NMENT LIST	1. Brai	nch		2. Division /	Group	C	
3. Incide	ent Name			4. Operation	onal Period				
	Muc	kamuck		Da	ite: 9/7/202	:1	Tir	me: 0700-1900	
5. Oper	ations Personnel	-		<u> </u>	- 1.4 - 1.5 - 1.5			:	
Field C	perations	Josh Tellessen		Planning C	perations			Shane Robson	
Safety	Officer	Bob Schwiesow		Division/G	roup Supervisor			Tim Love	
6. Reso	urces Assigned this Per	iod Table 1	11.11%		ALT CONTRACTOR STATE			1	
RO#	Strike Team/Tas Force/Resource	achee! I		# People	Contact (phone etc.)	•	EMT	Remarks	
0110	Swedberg FMOD	James McKiddy		2		-		LWD 9/13	
0-451	HIOP	Kevin Peterson		1				LWD 9/9	
C-122	Franco Reforestation I	HC2 Jesus Franco		20				LWD 9/9	
E-49	Chewack Wildfire T4	Greg Issac		3				LWD 9/23	
E-52	Methow River Wildfire	e T4 Jordi Hernandez		3				LWD 9/16	
E-75	Fire Control T6	Paul Fuchs		3				LWD 9/16	
E-77	Torch Fire T6	Andrew Gruzin		3				LWD 9/15	
E-119	Riverbanks DOZ2	Jon Stehnike		2				LWD 9/9	
E-121	KL Farms T6	James Harter		3				LWD 9/10	
E-153	Brothers Fire CHIP	Kurt Hudson		3	i			LWD 9/15	
E-214	Justin Pitts GRD	Justin Pitts		2				LWD 9/9	
E-248	American Land Service	T5 Van Saruer		3				LWD 9/14	
E-59	UTV Team (Medic 35)	Todd/Kopeke		2			Ø	LWD 9/11	
S-2	REMS Team	Colin Stenhouse		4			Ø	LWD 9/14	
				51					
7. Worl	k Assignments								_

- 1) Continue to secure and mop-up, as needed, on all firelines that can be accessed by ground resources.
- 2) Utilize falling modules along paved roads and feller buncher off pavement to complete suppression repair work in campgrounds indentified by READ's.
- 3) Utilize IR around structures and other areas of concern and mop-up as needed.
- 4) Patrol and mop-uo along 38 Road corridor.
- 5) Continue working with READ's on suppression repair work.

8. Special Instructions

- 1) READ's will rove all divisions. READ's will check in and out with Division Supervisors.
- 2) Resources identified for initial attack need to be prepared to assist local unit as requested.

9. Communication Summary

Function	Name	Mode		Frequency	A STATE OF THE STA
COMMAND	COMMAND 3 or 4	N	See Communi	cation Plan ICS205 for	Details
TACTICAL	TAC 5	N			
AIR	PRIMARY A/G	N			
Prepared by (RESL)		Appro	ved by (PSC)	Date:	Time:
			Debbie Plummer	9/6/2021	1800

	DIVISION ASS	IGNMENT LIS	Г	1. Bran	nch		2. Division / 0	Group	F
3. Incid	ent Name				4. Operation	onal Period			
	M	uckamuck			Da	te: 9/7/20 2	21	Tir	me: 0700-1900
5. Oper	ations Personnel		: T		Ha				Fire the second
Field C	perations	Josh	Tellesser	n	Planning C	perations			Shane Robson
	Officer		Schwieso	w	Division/G	roup Superviso	r		Doug Dodson
6. Reso	urces Assigned this			# . 	1 .		7 B 2 N. J		
RO#	Strike Team/T Force/Resou		Lead	er 	# People	Contact (phone etc.		EMT	Remarks
E-129	Libery Wildfire T5	Cedar	Watson		3				LWD 9/9
E-337	Methow River Wild	fire T4 Clayto	on Bell		3				LWD 9/13
E-373	S&L Services WT2	Dan F	uchser		1				LWD 9/11
							•		
					7				
7. Wor	k Assignments								
2) Ba 3) Co 4) Co	mplete suppressio ckhaul excess equi ntinue to patrol ar ntinue working wi	pment within d id mop-up, as n	ivision. eeded, o	on all firelin	es that ca				
8. Spec	ial Instructions								
, ,	AD's will rove all di sources identified					•			
	munication Summar								
	Function	Name	Mode		······································	C C	Frequency	OF 5-	D-4-il-
	OMMAND C	TAC 6	N			See Communica	ation Plan ICS2	US TOP	Details
	AIR	PRIMARY A/G	N			 	<u></u>		
Prepare	ed by (RESL)			ed by (PSC)	<u> </u>		Date:		Time:
	**				ie Plumme	r	9/6/202	21	1800

	DIVISION	ASSIGNMEN [*]	LIST	1.	Branch		2. Division /	Group	X
3. Incid	lent Name		·		4. Operation	nal Period	•		
		Muckamucl	(Da	te: 9/7/ 2	2021	Tir	me: 0700-1900
5. Ope	rations Personne								
Field	Operations		Josh Tellessen		Planning O	perations		S	hane Robson
Safety	Officer		Bob Schwiesow	,	Division/G	oup Supervi	sor		Max Leyva
6. Reso	ources Assigned t	his Period			e Paris III			1	
RO#	Strike Team/Task	Force/Resource	Lead	er	# People		one, radio freq, etc.)	EMT	Remarks
0-108	PAP Timber FMC)D	Paul Picolet		2				LWD 9/11
C-39	ASI Arden Inc. H	C2	Ignacio Sartana	a	20				LWD 9/14
E-14	Hi Country T6		Zack Mostad		3	_			LWD 9/7
E-131	Anderson Excava	ation EXCA	Chris Anthrop		2				LWD 9/10
E-274	Liberty Wildfire	T6	Cliff Middleton)	3				LWD 9/16
0-810	EMTF		Rob Mulroone	<u>у</u>	1			Ø	LWD 9/12
E-251	Wilderness Med	ics Ambulance	Amarisa Caswe	ell	2			Image: section of the content of the	LWD 9/11
					33				
7. Wo	k Assignments					: #11			
2) G 3) C	ontinue to secur rid for spots on S ontinue working tilize excavator t	SE portion of the with READ's o	ne division. n suppression			be accesse	d by ground r	esour	ces.
8. Spe	cial Instructions								
2) Re	EAD's will rove a esources identifing the stage of the st	ed for initial at				-			
9. Com	munication Sumr	nary							
	Function	Name	Mode	7 1 1 1 1			Frequency		Value of the second of the sec
	OMMAND	COMMAND 3			Sec	Communicat	tion Plan ICS205	for Det	tails
	TACTICAL	TAC 7	N	.		_			
l	AIR	PRIMARY A/	G N						

Approved by (PSC)

Debbie Plummer

Prepared by (RESL)

Time:

1800

Date:

9/6/2021

IAP Map

Muckamuck Fire WA-COF-2290 09/06/2021

13337 acres at 08/30/2021

1.2055 1 1.5 2 2.5 3



Label Point

Completed Dozer Line
Completed Fuel Break

H Completed Hand Line

R Completed Road as Line

Planned Dozer Line

R Planned Road as Line

Access or Improved Road

Other

Road Repair

Route

Fire Edge

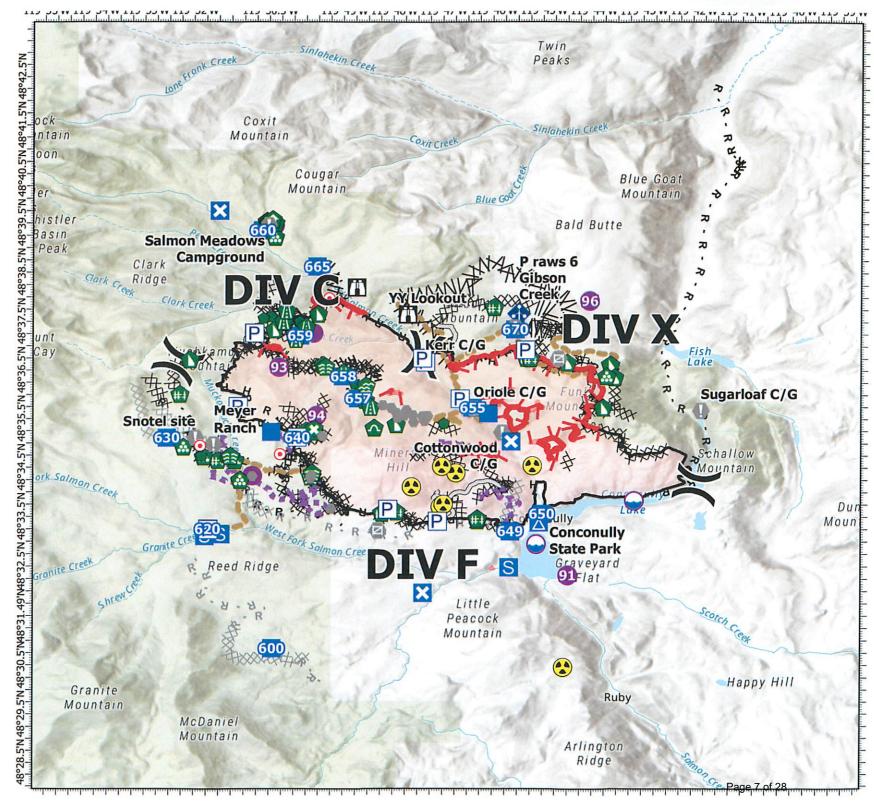
Contained Line







Bradley Dilg 09/06/2021 1712 Transitioned Team WGS 1984 Datum. LatLong Grid



WEATHER

1. Incident Name

Muckamuck

2. Date Prepared

9/6/2021

3. Time Prepared

1800

DISCUSSION

High pressure will be in place through Tuesday leading to lightterrain driven winds through Tuesday. A quick moving shortwave will begin increasing cloud cover on Tuesday evening and bring a slight chance of showers along the Cascades and Western portion of fire on Wednesday. Little no accumulation is expected. Winds will shift to the South/Southwest and be breezy during the afternoon with gusts around 20 MPH. Winds will decrease through the evening and overnight.

TUESDAY
Sky/weatherPartly cloudy. Haze.
CWR0 percent.
LAL1.
Max temperatureRidge tops: Around 70 Valleys: around 80.
Min humidityRidge tops: 25 percent Valleys: around 18.
Wind (20 ft)Downslope, down valley North winds around 3 to 6 mph in the morning shifting to the
southeast 5 to 9 mph after 11 AM.
Mixing height of t AGL in the morning increasing to 4000 ft AGL in the afternoon.
Transport windsSoutheast around 10 mph.
Haines Index3 or very low potential for large plume dominated fire growth.
<u>TUESDAY NIGHT</u>
Sky/weatherPartly cloudy. Haze.
CWR percent.
LAL1.
Min temperatureRidge tops: Around 55 Valleys: around 60. Max humidityRidge tops: 44 percent
Valleys: around 38.
Wind (20 ft)Downslope, down valley Northwest winds 4 to 8 mph.
Mixing height3500 ft AGL in the evening decreasing to near the surface overnight.
Transport windsNorthwest around 5 mph.
Haines Index3 or very low potential for large plume dominated fire growth.
WEDNESDAY
Sky/weatherMostly cloudy with slight chance of showers. Haze.
CWR0 percent.
LAL1.
Max temperatureRidge tops: Around 67 Valleys: around 80.
Min humidityRidge tops: 37 percent Valleys: around 25.
Wind (20 ft)Downslope, down valley North winds around 3 to 6 mph in the morning becoming South 6 to
10 mph with gusts near 20 mph in the afternoon.
to inpir with gusts hear 20 inpir in the afternoon.

9. Prepared by (Name and Position)

Transport winds.....Southeast around 10 mph.

Debbie Plummer, PSC3

Mixing height......0 ft AGL in the morning increasing to 4000 ft AGL in the afternoon.

Haines Index......3 or very low potential for large plume dominated fire growth.

FIRE BEHAVIOR FORECAST

FORECAST NUMBER: 56	TYPE OF FIRE: Wildfire
FIRE NAME: Muckamuck	OPERATIONAL PERIOD: September 7, 2021
	Day Shift
DATE ISSUED: 09/06/21	TIME ISSUED: 2000
UNIT: WA-COF	SIGNED: Roy L. Walker
	Typed/printed: Roy Walker

INPUTS

WEATHER SUMMARY: See attached fire weather forecast for details.

Clear all day and much warmer and dryer. Terrain winds on Muckamuck with gusts to 15 mph in the afternoon.

Haines - 4 (Low)

LAL - 1 CWR -0

FIRE BEHAVIOR

GENERAL:

Fire should stay moderately active through the night with the poor humidity recovery overnight. Fire behavior will increase by afternoon with the stronger up-drainage gusts as heavy interior fuel pockets continue to burn out. 1,000-hour and 10,000-hour fuels are still very receptive to spotting.

Spotting Distance from ridge tops to 500 feet in the afternoon, sheltered areas short range at less than 500 feet. The Probability of Ignition will be 40-60% by mid-afternoon.

SPECIFIC:

Muckamuck: Fuels have dried from the moisture 7 days ago. With the dryer conditions, will see more smokes making for another good day for mop-up. Interior un-burned island will continue to consume. Light up-drainage winds will not be a issue except for heat within 500 feet of the lines.

Continue to watch out for reburn in green fuels mainly along drainage bottoms and along the 38 Road.

IA: Moderate spread is expected from new starts in the timber at 3-5 ch/hr. Lower elevation fires in fine fuels could see spread rates of 40-60 ch/hr by late afternoon.

AIR OPERATIONS: Expect little impact to air operations from smoke.

SAFETY

Weather Becoming Hotter and Dryer.
Have good Lookouts, Communications, Escape Routes and Safety Zones.

NC	IDENT RADIO COM	MMUNICATIONS P	PLAN I-205	1. INCIDENT NAME			2. DATE/TIME PREP	ARED		3. OPERATIO	NAL PERIOD DATE/TIME
				Muckamuck	Fire	Ð	09/06/2	2021			09/07/2021 DAYS
_				4. BAS	C RAD	10 CHANNEL	UTILIZATION				
;h #	Function	Channel Name	Assignment	RX Freq	N/W	RX Tone/NAC	TX Freq	N/W	TX Tone/NAC	Mode Analog (A) Digital (D) Mixed (M)	Remarks
ı	COMMAND	FOREST ROCK	CMD	170.4750	N	146.2	164.9625	N	110.9	Α	FS RPTR ROCK
2	COMMAND	FOREST TUNK	CMD	170.4750	N	146.2	164.9625	N	141.3	Α	FS RPTR TUNK
3	MUCK COMMAND	CMD 3	CMD	151.1375	N	136.5	159.4725	N	136.5	Α	CMD 3 ON BUCK MNTN (LINKED)
4	MUCK COMMAND	CMD 4	CMD	154.4525	N	136.5	158.7375	N	136.5	Α	CMD 4 ON FUNK MNTN (LINKED)
5	TAC	TAC 5	DIV C	154.2800	N	156.7	154.2800	N	156.7	Α	DIVISION C *****
6	TAC	TAC 6	DIV F	154.2650	N	156.7	154.2650	N	156.7	Α	DIVISION F *****
7	TAC	TAC 7	DIV X	154.2950	N	156.7	154.2950	N	156.7	Α	DIVISION X *****
8	TAC	TAC 8	R/R GRP	154.2725	N	156.7	154.2725	N	156.7	Α	ROADS AND REPAIR GROUP
9	TAC	TAC 9		154.2875	N	156.7	154.2875	N	156.7	Α	
10	TAC	FS TAC	FS TAC	168.2000	N	0.0	168.2000	N	146.2	Α	FS TAC
11	TAC	DNR COMM		151.4150	N	103.5	151.4150	N	103.5	Α	DNR COMMON
12	TAC	DNR TAC1	TAC	151.3100	N	103.5	151.3100	N	103.5	Α	DNR TAC 1
13	TAC	RED NET	TAC	153.8300	N	0.0	153.8300	N	156.7	Α	REDNET
14	A/G	PRIMARY A/G	A/G	168.0125	N	0.0	168.0125	N	0.0	Α	Muckamuck Primary A/G
15	A/G	A/G 3	A/G	166.6125	N	0.0	166.6125	N	0.0	Α	A/G 3
16	AIRGUARD	AIRGUARD	EMERGENCY	168.6250	N	0.0	168.6250	N	110.9	A	EMERGENCY USE
. S	pecial Instructions:										10//
i. 1-	-205 Prepared By: Co	ommunications Unit L	.eader	Name:	Т	odd Bellef	euille COML		Signature		D Tulkfully

Muckamuck USFS Fire Suppression Repair Standards

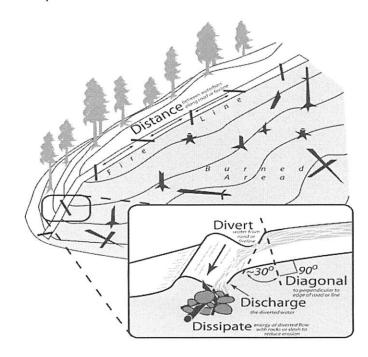
Objectives

The intent of the Suppression Repair Plan is to mitigate adverse effects to resources resulting from fire suppression activities on the Muckamuck Fire. Surface water/erosion control, maintenance of site productivity and the repair of high valued recreational sites are the focus of this work. Completion of this repair work is critical to reducing the impacts of erosion and sedimentation to minimize continued resource impacts.

Fire line repair - Hand line

- Hand crews will be used to implement water bars. No equipment will be used to install water bars.
- Pull berms and blend disturbed areas to fit the natural contours.
- Height of hand constructed water bars should average 12 inches. Use natural dips and rolls where possible.
- Place water bars on hand lines with the following general spacing guidelines, modify as needed to minimize soil erosion.
 - o < 15% 150' spacing (distance apart)</p>
 - o 15 to 30% slope 75' spacing
 - o 30% to 45% 50' spacing
 - > 45% slope 25' spacing
- Construct water bars at a 30 to 45-degree angle from the fire line, directing water away from the fire or other
 parts of the fire line. When feasible alternate directions of outlet.
- Pull soil, litter, duff and debris removed from the fire line back onto the line, to obliterate evidence of the line as
 much as possible. Strive for 65% to 85% ground cover. In grassy areas replace soil and sod and scatter rocks to
 naturalize the line location.
- Trenching should be filled in and the line restored to blend with the undisturbed soil contours.
- Block road access to hand lines to discourage recreational use, i.e. attempt to visually obscure junction of line and road and make travel on first section very inconvenient.

Water bars: the 5 Ds: "When locating and building water bars for all hand line and heavy equipment line, place them the right Distance apart, at a Diagonal to the fire line, so that they Divert, then Discharge, then Dissipate the energy of the flowing water. Be sure to make them deep enough so that they will be durable". *See diagram



Fire line repair - Dozer line

• Pull berms and blend disturbed areas to fit the natural contours – i.e. fully obliterate all dozer lines. Accomplishment of this specification is with use of an excavator (Type II or Type III preferred) with a 2 to 3 cubic yard bucket with an opposable thumb (rake is preferred), with capabilities of working on steep slopes (50 to 60%) and capable of having a 30 to 35 ft. reach. Do not use dozers for rehabbing fire lines.

- Compacted soils associated with suppression staging areas, helipads, and "intensively used" areas from suppression equipment should be de-compacted with an excavator bucket/rake to a depth of 12 to 18 inches (or less in the presence of underlying rock).
- Scatter branches, wood, rock, sod or other material to naturalize the fire line and prevent soil erosion. Hand
 crews may be used to augment scattering of wood debris/slash to naturalize the dozer line and prevent soil
 erosion.
- Hand crews may be used to construct water bars on slopes greater than 50% or in areas too hazardous for safe excavator operation, or in areas where excavator use may create additional surface disturbance.
- In areas designated for road or access re-closure, re-contour road prisms to original slope contours and/or construct closure structures (berms and/or boulders) to eliminate undesired vehicle access. Re-establish original road widths to no greater than 12 feet as approved or otherwise specified.
- Place water bars on dozer lines with the following general spacing guidelines, modify as needed to minimize soil
 erosion.
 - o 5 to 20% slope 120 to 150' spacing (distance apart)
 - o 21 to 34% slope 90' spacing
 - > 35% slope 80' spacing.
- Construct water bars at a 30 to 45-degree angle from the fire line. Directing water away from the fire or other
 parts of the fire line. When feasible alternate directions of outlet (see diagram on bottom of page 3).
- Water bars should be 12" to 18" high
- Water bars should be cut into the fire line do not simply push up loose soil.
- Provide an outlet for water on the downslope end of the water bar.
- Slash can be placed at the outlet of the water bar to disperse runoff
- Block access to dozer lines that leave from existing open roads using boulders or natural large woody material, to eliminate motorized access.
- Block road access to dozer lines to discourage vehicle and recreational use, i.e. attempt to visually obscure
 junction of line and road and make travel on first section very inconvenient.
- Fire lines through damp or wet areas/riparian zones need to be rehabbed by hand if possible, or by the lightest equipment possible, with the least number of stream crossings. If damage is minimal, consider the possibility of not doing additional work. Consult READ if needed for area specifics.

Fire line repair-Machine line using a Feller Buncher

- Trees cut of merchantable size along roads for suppression and/or contingency lines will be processed and decked. Non merchantable trees cut will be consolidated for disposal.
- Stumps will be cut to a height less than 1'. Stumps with a diameter less than 4" will be cut to a 6" height.
- Machine tracks will be blended to fit natural contours. Bare soil will be scattered with slash and/or seed.
- Ditches and culvert openings will be cleared of debris to ensure hydraulic capacity.
- Machine fuel breaks using a road will follow the appropriate road maintenance specifications.
- Machine fuel breaks using a dozer line will follow the appropriate dozer line repair specifications.

Roads

- Repair road damage incurred during incident suppression. Grade damaged roads.
- Pull berm on outside edge of road including side cast material back onto the grade surface.
 Clean drain ditches to restore rolling dip functions.
- Harden or restore existing drainage surfaces and structures (water bars, rolling grade dips, and natural drains)
 with dips or raised berms capable of facilitating existing traffic flows and vehicle types.
- Construct rolling grade dips or water bars as necessary to accelerate stabilization of road surfaces from suppression impacts of increased traffic levels.
- Clean culverts inlets/outlets with backhoe and/or hand crews as needed to maintain hydraulic capacity.
- In extreme dry climates or soil conditions, compaction of rolling grade dips may be difficult or impossible without the addition of water. Soil moisture conditions should be conductive toward compaction. Auxiliary

- equipment such as a water truck (with spray nozzle) may be needed to facilitate re-establishment of road conditions, which were degraded by suppression activities.
- Pile, chip, or end haul slash to designated disposal areas where determined necessary along roadside areas
 prepared as fuel breaks. Leave firewood material (logs too big to be chipped) stacked along roadsides for future
 use and removal.
- Re-close roads opened for fire suppression to current hydrologically stable as designated in site specific repair standards that follow.

Maintenance Level One Roads

- Start work at back end of road and proceed toward entrance.
- Block access to dozer line to prevent future vehicle use.
- Do not construct water-bars within cultural resource boundaries if such are present.
- Ensure stream crossings are open to allow water flow down the channel. Streams should match natural upstream and downstream gradient.
- Water bars ensure end is open and clear of obstructions.
- Water bar Angle 30-45°. Angle so water is carried from road cut bank to road shoulder. Ensure water bars intercept ditchlines.
- Water bar Height minimum 18" compacted berm.
- Depth Construct water bars so the bottom of the ditch is a minimum 6" into solid soil. Do not construct any
 water bars completely from loose soil.
- Construct Earthen Barrier at entrance of road. Construct 4-8' feet high. Incorporate slash with the soil when
 available. Generate barrier from material removed from the road prism behind the berm and from surrounding
 bank material as available. Material excavated from the road prism behind the barrier shall not exceed 2 feet in
 depth.
- Construct water bars every 100 feet on steeper road segments (8% grade or steeper), 200 feet on 4 to 6% grade, and every 300' on flatter ground (0 to 4% grade).
- Where there are drainages crossing the roads such as culverts, build water bars immediately downhill from these features. Connect water bars to road ditchline when ditchlines are present.
- Apply dry seed mix to road prisms being reclosed or decommissioned to provide competition with noxious weeds.

Maintenance Level 2 and above Roads

- Remove berms that exist on outside shoulder of roads to ensure road surface drainage.
- Clean drainage ditches when such have been impacted by fire suppression activities. Restore rolling dips if present.
- Harden or restore existing drainage surfaces and structures (water bars, rolling grade dips, natural drains, ditchlines and culvert catch basins) consistent with their pre-fire suppression construction and character.
- Construction of features such as drain dips may require watering to allow soil compaction.
- Some roads may require additional work and materials to repair suppression related use. Typical examples are-but not limited to—surface gravel replacement and asphalt patching. Resource Advisors will identify roads that
 need such additional repair.

General

- Chip, pile or disperse large concentrations of unburned fuels created during suppression efforts, or pile as requested by the unit.
- Identify and inventory fences, signs, and other improvements damaged by the incident.
- Remove garbage, litter, etc. (including cigarette butts) from control lines, roads, drop points, and staging areas and dispose off-site.
- Signs/flagging removal: All signs and flagging will be removed from fire lines, roads, drop points, staging areas, camps, and water chances. Leave only flagging in place which marks hazards, resource concerns, etc.

- Avoid unnecessary felling. In particular, avoid cutting trees and snags >21" dbh. Do not cut or damage any green **non-hazardous trees** anywhere within the fire area unless the tree has been specifically marked for felling by the repair team.
- Approved certified weed-free, local grass seed mix will be applied in the fall to all areas disturbed by suppression activities by the unit.
- All suppression features will be GPS'd and GIS files given to the home unit.
- Stock ponds used for drafting water will be brought back to pre-fire levels. These locations will be provided by the home unit.
- All drainages (intermittent and perennial), meadows, and springs remove all soil, slash, and other debris that has been pushed into these areas. Streams should match natural upstream and downstream conditions.
- All water drafting sites (streams and lakes) return area to pre-fire condition.
- Remove all supplies, equipment and trash not needed for contingency.
- Remove all shelter wrap and staples.

MOP UP SPECIFICATIONS FOR DNR PROTECTED LANDS

Always consider over-head hazards prior to putting fire fighters in harm's way for mop up. Mitigate hazards and exposure as needed.

Achieve 100% mop-up along and inside the fire perimeter to a distance that is adequate to ensure the perimeter is secure to prevent the fire from escaping across existing containment lines.

To reduce hazards to firefighters during final mop-up, fall snags that pose "imminent" danger along all open roads within the fire perimeter.

Known spot fires outside the control lines will be 100% mopped up where appropriate to do so, a route to them will be flagged, and the perimeter of spots mapped in GIS.

Mop-up of partially burned areas further inside the lines will be determined on a case-by-case basis.

For structures and sensitive resources within the interior of the fire line, mop-up to a level to ensure that there will be no future effects from the fire.

As mop-up specifications are met on a Division, Operations will develop a plan for the resources and equipment to be left in place that may be required for future contingency actions.

Mop-up will be verified by aerial infrared equipment and/or gridded prior to fire turn back to Land Manager or Protecting Agency.

Notify Agency Representative if a cultural site is found during mop-up.

SUPPRESSION REHABILITATION STANDARDS FOR DNR PROTECTED LANDS

All Tractor and Hand Lines

- Place water bars on tractor and hand lines with the following spacing guidelines:
 - o 6-9% slope maximum of 300' apart
 - o 10-15% slope maximum of 200' apart
 - o 15-25% slope maximum of 100' apart
 - o 25% to 45% slope maximum of 50' apart
 - o Greater than 45% slope every 25-50'
 - **Spacing distances above should only be used as a guide. Use judgment in locating water bars to minimize soil erosion potential.
- Pull soil, litter, duff, and debris removed from the fire line back onto the line to cover non fire perimeter hand lines.
- Flatten large berms on all fire lines.
- Leave all freshly fallen trees as they lay. Do not limb or buck.
- Fire lines through damp or wet areas/riparian zones need to be rehabbed by hand if possible, or by the lightest equipment possible, with the least number of stream crossings. If damage is minimal, consider the possibility of not doing additional work.

- Block road access to hand and dozer lines to discourage recreational use. Attempt to visually
 obscure junction of line and road and make travel on first section very inconvenient (i.e. it will
 be too much trouble to access the line to be worth it, especially for motorcycles).
- Disperse large concentrations of unburned fuels created during suppression efforts.

Tractor Lines

- Tractor lines on slopes less than 40%:
 - Water bars may be installed by tractor or track mounted excavator. Use of excavator is preferred where berms need to be pulled in. Pile smaller debris and slash at the outlet of water bars.
 - o Use only D-6 class or smaller tractors, 4 or 6 way blade preferred
 - o Install tractor or excavator water bars at a 20 to 30 degree angle to the fire line
 - Height of bars on machines constructed water bars not to exceed 24".
 - Rip areas of compacted soil.
- Tractor lines on slopes greater than 40%
 - o Install water bars by hand or with an excavator
 - o Install water bars at a 30 to 45 degree angle to the fire line.

Hand Lines

- Height of hand constructed water bars should average 12 inches. Soils in most of the burned areas are light and loose (pumice derived), making bars less than 12 inches much less effective. In heavier soils, bar heights of 8-12" are acceptable.
- For hand line rehab, construct water bars at a 45-degree angle from the line, directing water away from the fire or other parts of the fire line.

Trees and Felling Operations

- Leave all freshly fallen trees as they lay. Do not limb or buck.
- Avoid cutting trees and snags >20" dbh. Do not cut or damage any green non-hazardous trees
 anywhere within the fire area unless the tree has been specifically marked for felling by the
 rehab team. Large Trees are in short supply in the local area due to past fires.

General Rehabilitation Concerns

- Identify and inventory fences, signs, and other improvements damaged by the incident
- Repair road damage incurred during incident suppression.
- Remove garbage, litter, etc., from control lines, roads, drop points, and staging areas and dispose off-site.
- Signs/flagging removal: All signs and flagging will be removed from fire lines, roads, drop points, staging areas, camps, and water chances.

SAFETY MESSAGE

MY SAFETY

It is important that individual responsibility be taught as the basis for a viable safety program. Some of those individual responsibilities are:

- Fitness for duty. Begin each work shift both mentally and physically prepared for the rigors of wildland firefighting. Getting adequate sleep, maintaining a healthy diet, and proactively participating in physical training are the foundation of "My Safety".
- Maintain personal hygiene and camp / worksite cleanliness. Make sure you
 wash your hands and take steps to prevent the spread of germs. Help camp
 staff out by making an effort to clean up after yourself.
- Utilization of personal protective equipment. Wear your PPE without being told. Each individual is responsible for performing their own risk assessments. If a hazard is identified that can be mitigate by wearing a particular PPE component it should be utilized. Fireline supervisors have more important duties to focus on other than performing glove patrol.
- Following safe work practices. Using a spotter when backing up vehicles is the prudent and professional course of action. If you are unsure of how to perform a job task safely, ask your supervisor or experience coworker.
- Using the correct reference materials is an important aspect of safety. You should have a working knowledge of the IRPG, IAP, and your local operating guidelines.
- Ensure instructions are clearly understood. Communication is a basic responsibility for all fire personnel. Ask appropriate questions to clarify uncertain issues. Speak up when you observe hazards that may place yourself or others at risk.
- Maintain situational awareness at all times. Awareness is a vital component
 of "My Safety". Pay attention to what is happening around your area of
 operations. Always display an awareness of what is happening around you
 by asking questions or making comments.

Do not expect someone else to be responsible for your safety. Take it upon yourself to make "My Safety" you number one priority.

Muckamuck Finance Information

WA-COF-2290 P6N75D-0621 221-KTR

NEIMT Team 2 Finance Contact Information:

Cari Richardson, FSC3, 509-936-3563 Michelle Leonard, FSC3(T), 509-640-8716

Please continue to submit all documents electronically to incident finance email: **2021.muckamuck.finance@firenet.gov**

All email transmissions shall include in the subject line:

- Resource Number
- > Resource Name
- > Type of document being emailed (example: CTR, ST Shift Ticket, Agreement, etc.)

CTRs and Shift Tickets MUST be signed by your incident supervisor

There will be a collection box available for shift tickets and CTRs at Conconully State Park after briefing each morning.

Starting 9/7/2021, all resources assigned to the Muckamuck incident will demob in person at Muckamuck ICP at the Omak Stampede Grounds. Please be sure you have all time submitted (CTRs and shift tickets MUST be signed by incident supervisor).

Muckamuck Fire LOGISTICS INFORMATION

ICP:

0600-2200

SHOWERS:

Conconully Camp: 0430 to 2300

ICP: 0430 to 2300

MEALS:

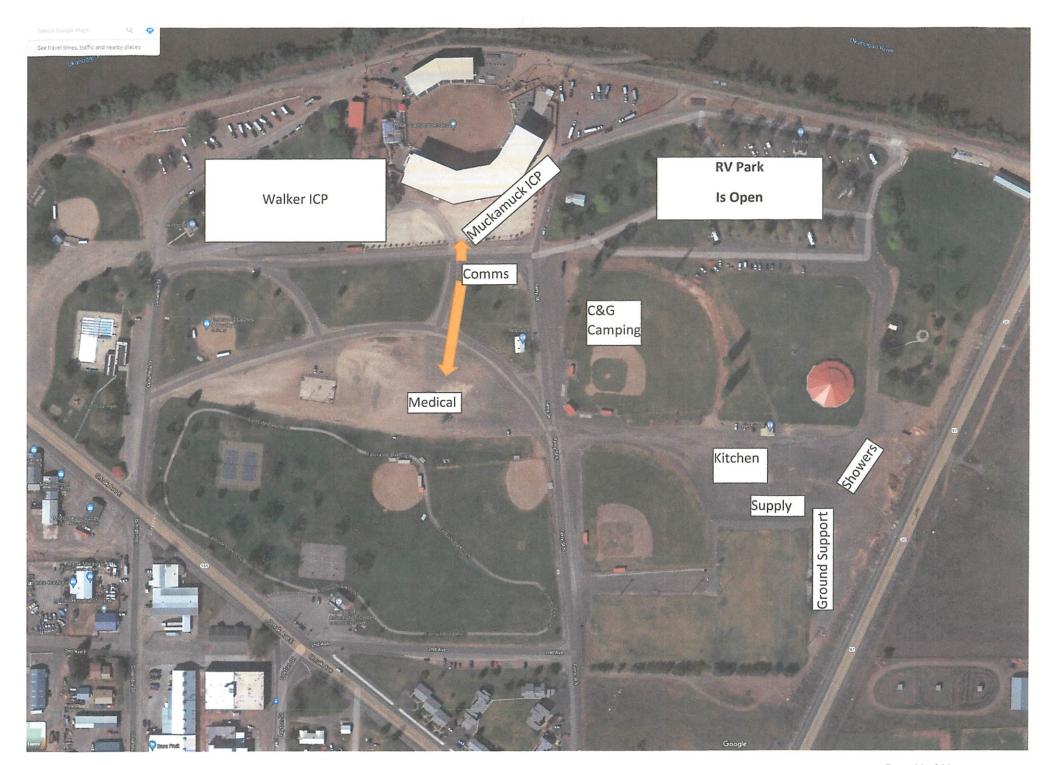
Conconully Camp: 0600 to 0800 and 1915 to 2115

ICP: 0600-0900 and 1800-2100

All hours are subject to change at both locations.

SUPPLY ORDERING: Please get those to C&G staff during briefing. Also, they can be turned in to Division Supervisors and Operations.

- There is a map for added information
- Please keep vehicle speeds down through fire camp & ICP.
- If you need assistance after hours, please contact Mike Bucy from Logistics: 509-953-3189.
- Masks must be worn inside & outside at camp and in vehicles with others.
- All lunches will be at the reefer. Camp crew will assist you in handing out ice and lunches. Water and sports drinks will be at the Reefer as well. Try and send as few people as possible to pick up supplies.





	Incident Name	2. Date Prepared	3. Time Prepared
HR Message	Muckamuck	9/6/2021	1800

You hear everyone talk about **LCES** and it is no different in Human Resources. In human resources we too have LCES.

- L Look out for each other sometimes we get our head down and don't pay attention to what is going on around us.
- **C** Communicate with each other to assure that little issues are resolved while they are small.
- **E** Evaluate the situation and react appropriately. Over reaction usually means that there is more to the situation than you know.
- **S** Solutions be proactive in coming up with solutions to the problems as they arise.

9. Prepared by (Name and Position)





Fire Information Resources

Resource Logo	Weblink	QR Code
POREST SERVICE USDA FOREST SERVICE	https://www.facebook.com/colvillenf	
NORTHEAST WASHINGTON INTERAGENCY Type 3 Incident Management Team	https://www.facebook.com/newimt3	
InciWeb - Incident Information System	https://inciweb.nwcg.gov/incident/7786/	

COVID-19 Exposure Risk

COVID-19 is spread mainly from person to person. Spread occurs more commonly between people who are in close contact (within about 6 feet for a total of 15 minutes or more over a 24-hour period) with one another through respiratory droplets that come from the mouth or nose when an infected person coughs, sneezes, sings, or speaks. COVID-19 can be spread by people who are not showing symptoms or before their symptoms begin.

COVID-19 is spread in three main ways:

- Breathing in air when close to an infected person exhaling small droplets and
 particles containing the virus. Spread that occurs by breathing in air that contains
 the virus when you are not in close contact is uncommon but occurs more often in
 enclosed spaces with poor ventilation (airflow) and when you are exposed for a
 longer period of time.
- 2. Having small droplets and particles containing the virus land in the eyes, nose, or mouth, especially through splashes and sprays like a cough or sneeze.
- 3. Touching the eyes, nose, or mouth with hands that have the virus on them. It is also uncommon for COVID-19 to spread through contact with contaminated surfaces. This means that you are unlikely to get COVID-19 by touching your eyes, nose, or mouth after touching a contaminated item

Close contact means:

- Being within 6 feet of a person who has COVID-19 for a total of 15 minutes or more over a 24-hour period, or
- Having direct exposure to respiratory secretions (e.g., being coughed or sneezed on, sharing a drinking glass or utensils, kissing), or
- Caring for a person who has COVID-19, or
- Living with a person who has COVID-19

For more information visit www.cdc.gov

WILDLAND FIRE COVID-19 SCREENING TOOL

Today or in the past 24 hours, have you had any of the following symptoms¹?

Symptom
Cough more than expected?
Shortness of breath or difficulty breathing?
Fever? Chills?
Muscle pain, outside your normal for firefighting?
Sore throat?
New loss of taste or smell?
Fatigue, outside your normal for firefighting?
Headache, outside your normal for firefighting?
Congestion or runny nose, outside your normal for firefighting?
Nausea or vomiting
Diarrhea
* Take temperature with no-touch thermometer, if available *

Instructions for Screening

Item	What to Do
If resource has a cough that is more than expected, shortness of breath or difficulty breathing, or any other symptoms listed.	DO NOT MOBILIZE
At Entries:	DO NOT ANNOUNCE
Consider adequate number of personnel needed for screening. Although medical personnel are ideal, screeners do not have to be medically trained.	Ask individual to step aside and follow the steps below.
If resource has cough, shortness of breath or difficulty breathing, or any other listed symptoms including fever (over 100.4) at entry.	

Steps to follow	
Escort symptomatic individual to isolat	ion area.
Isolation support personnel should begi	n documentation.
Have symptomatic individual contact S	upervisor for further direction.
Notify public health officials.	
Have individual transported as appropri	iate.
Protect and secure any collected Person Information (PHI).	nal Identifiable Information (PII) or Personal Health

¹ Symptoms of Coronavirus https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

ACTIVITY LOG (ICS 214)

1. Incident Name:			2. Operational Period:	Date Fron	n: Date To:
				Time From	m: Time To:
3. Name: 4. IC			S Position:		5. Home Agency (and Unit):
6. Resources Assi	igned:		··· · · · · · · · · · · · · · · · ·		
	me		ICS Position		Home Agency (and Unit)
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7 A - 4: 14 .					
7. Activity Log:	Notable Activities		··		
Date/Time	NOtable Activities				
	 				
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8. Prepared by: N	lame:		Position/Title:		Signature:
ICS 214, Page 1			Date/Time:	_	

MEDICAL PLAN (ICS 206 WF)

			Dato/	Time 00/07	10004 0	700 4000			
	Muckamuck				Date/Time 09/07/2021 0700-1900				
es									
				Phone & EMS Frequency		Advanced Life Support (ALS) Yes No			
Lifeline Omak, WA			Ά		Command 911 (secondary)				
rvices									
	Phone			7	Гуре of Ai	rcraft & Capabi	lity		
NA	Command 911 (secondary) Command 911 (secondary)			Critical Air Transport Critical Air Transport					
, WA									
Coor Degree DD° N	dinate Standard s Decimal Minutes MM.MMM' N - Lat	Trav Air	el Time Gnd	Phone	35.5.7.21 . 6.53		Level of Care		
Lat:	48° 06.37 N	25	50	50 5-00-00/3245-0	х	Level 4 T	Facility rauma		
Long :	119° 46.97 W	mi n	min	509-645-					
VHF: 155.340	3300								
Lat:	48° 23.79 N	15	25	509-429- 0922	Х	Level 4 Trauma			
Long :	119° 32.79 W	mi n	min		100000				
VHF:	155.340								
Lat: Long : VHF:	47° 24.43 N 120° 19.27 W 155.340	30 mi n	Min	509-662- 1511	X	Level 2/3	Trauma		
Lat:	47° 36.10 N	60	320		Х	Level 1 Trauma and burn			
Long :	SHOOT SALENE LADONALESTATION OF PORTION SALETON	mi	Min	206-744- 4074		center			
vHF:									
Group Capability Division C (Muckamuck) REMS Team Wild			ess		nouse				
Division F (Muckamuck)			Wilderness Medics Ambulance			Amarisa Caswell Rob Mulrooney			
			/	Kevin Todo	I, Mike K	oepke			
lan for	COVID related in	ciden	ts.						
7. Prepared By (Medical Unit Leader) 8. Date/Ti				9. Reviewed By (Safety Officer) 10. Date/Tii					
ai Unit	8. Date/	Time		9. Review	ed By (Sa	ifety Officer)	10. Date/Time		
	GPS Coor Degree DD° M Lat: Long : VHF: Lat: Lat: Lat: Lat: Lat: Lat: Lat: Lat	Phone NA Command 911 (seconda , WA Command 911 (seconda , WA Command 911 (seconda GPS Datum – WGS 84 Coordinate Standard Degrees Decimal Minutes DD° MM.MMM' W - Long Lat: 48° 06.37 N Long 119° 46.97 W : VHF: 155.340 Lat: 48° 23.79 N Long 119° 32.79 W : VHF: 155.340 Lat: 47° 24.43 N 120° 19.27 W 155.340 VHF: 155.340 Lat: 47° 36.10 N Long 121° 19.30 W : VHF: 155.340 Capability UCK) REMS Team W Medics UCK) Wilderness Me Ambulance EMTF UCK) EMPF team with Ilan for COVID related in	Phone VA Command 911 (secondary) WA Command 911 (secondary) GPS Datum - WGS 84 Coordinate Standard Degrees Decimal Minutes DD° MM.MMM' N - Lat DD° MM.MMM' W - Long Lat: 48° 06.37 N Long 119° 46.97 W : VHF: 155.340 Lat: 48° 23.79 N Long 119° 32.79 W mi N VHF: 155.340 Lat: 47° 24.43 N Long 120° 19.27 W 155.340 Lat: 47° 36.10 N Long 121° 19.30 W Trav Medics WHF: 155.340 Capability UCK) REMS Team Wildern Medics UCK) Wilderness Medics Ambulance EMTF UCK) EMPF team with UTV It Within an Incident will be collan for COVID related incident VI Within an Incident will be collan for COVID related incident It Within an Incident will be collan for COVID related incident	Omak, WA	Complete Address	Complete Address	Complete Address		

MEDICAL PLAN (ICS 206 WF)

Controlled Unclassified Information//Basic

Medical Incident Report

FOR A NON-EMERGENCY INCIDENT, WORK THROUGH CHAIN OF COMMAND TO REPORT AND TRANSPORT INJURED PERSONNEL AS NECESSARY.

FOR A MEDICAL EMERGENCY: IDENTIFY ON SCENE INCIDENT COMMANDER BY NAME AND POSITION AND ANNOUNCE "MEDICAL EMERGENCY" TO INITIATE RESPONSE FROM IMT COMMUNICATIONS/DISPATCH.

Use the following items to communicate situation to communications/dispatch.

ı.	CONTACT COMMUNICATIONS	DISPATCH (Verify correct frequency prior to starting report)

Ex: "Communications, Dlv. Alpha. Stand-by for Emergency Traffic."

2. INCIDENT STATUS: Provide incident summary (including number of patients) and command structure.

	ications, I have a Red priority C is TFLD Jones. EMT Smitl		by a falling tree. Reque	esting air ambulance to F	orest Road 1 at (Lat./Long.) This will be the Trout
	rgency / Transport iority	Ex: Unconscious, difficulty bre	athing, bleeding severe rious injury or illne to walk, 2° – 3° bums n or injury or illness.	ely, 2° – 3° bums more thess. Evacuation may ot more than 1-3 palm si	
	njury or Illness & sm of Injury				Brief Summary of Injury or Illness (Ex: Unconscious, Struck by Falling Tree)
Transpo	ort Request				Air Ambulance / Short Haul/Hoist Ground Ambulance / Other
Patient	t Location				Descriptive Location & Lat. / Long. (WGS84)
Incide	nt Name				Geographic Name + "Medical" (Ex: Trout Meadow Medical)
On-Scene Inci	dent Commander				Name of on-scene IC of Incident within an Incident (Ex: TFLD Jones)
Patie	ent Care				Name of Care Provider (Ex: EMT Smith)
3. INITIAL PATI	ENT ASSESSMENT: Con	nplete this section for each paties	nt as applicable (start wit	h the most severe patient)	-
Patient Assessm	ent: See IRPG page 106				
Treatment:					
4. TRANSPORT					
Evacuation Loca	tion (if different): (Descrip	ntive Location (drop point, i	intersection, etc.) or	Let. / Long.) Patient	s ETA to Evacuation Location:
Helispot / Extrac	tion Site Size and Hazard	ds:	- · · · · · · · · · · · · · · · · · · ·	·	
5. ADDITIONAL	RESOURCES / EQUIPM	ENT NEEDS:			
					seled litter, HAZMAT, Extrication
		Mr/Ground EMS Frequence	ies and Hospital C	ontacts as applicab Transmit (TX)	Tone/NAC *
Function	Channel Name/Number	Receive (RX)	TOTIONNAC -	Hansmit (IA)	TOTISTINAC
AIR-TO-GRND		 			
TACTICAL		_			
	 CY: <u>Considerations:</u> If prin	l nary options fail, what action	s can be implemented	d in conjunction with p	l imary evacuation method? Be thinking
8. ADDITIONAL	INFORMATION: Updates	/Changes, etc.			

REMEMBER: Confirm ETA's of resources ordered. Act according to your level of training. Be Alert. Keep Calm. Think Clearly. Act Decisively.