LGA Name: The Shire of Northam

Name of Assessor: Mincherton/McQuistan Date: January 2011

FESA Resource to Risk

Guide and Summary Sheets

MINCHERTON Linton

Bakers Hill Bush Fire Brigade

Resource to RiskSummary

Guide to using the FESA R2R Process and Summary Sheets

The R2R Process should be conducted every three years (more often if significant changes occur) for each Local Government Authority. Ideally, this exercise should be scheduled so that it can be attended by theLGA officer responsible for community emergency management coordination (CFM, CESM or similar), FESA District Manager and any other significant contributors. The R2R assessment is a useful process for considering the strengths and opportunities that exist in and around a community, as well as revealing threats and weaknesses through risk assessment, analysis and treatments. The R2R process is one where fair distribution and strategic placement of regional resources are considered as the primary consideration, with an emphasis on partnership and shared support among and between communities. The FESA Regional Director will be responsible for making prioritised and evidence-based recommendations to the ESL Capital Grants Committee, based on the collective R2R assessments across the region. The R2R is *not* intended to be a comprehensive catalogue of all resources or risks in an LGA. It is a process that develops a management plan for an identified risk that is currently considered to be inadequately treated. The information generated by the process should provide a firm foundation for a request for resources to the ESL Grants Committee.

Stage 1

1. **Bushfire Risk and Coverage –**Obtain and analyse the Bushfire Threat Analysis (BFTA) maps from Bush Fire & Environmental Protection, Research & Liaison. Print out the isochrone maps for the area being analysed(maps available through FESA District Managers at http://extranet/sites/volunteers/members/GIS/Pages/TravelTimeMapping.aspx). To get a complete picture, it may be necessary to also print out adjoining areas' isochrone maps and confirm the accuracy of the locations of existing BFS appliances on the maps[1]. Identify at-risk populated locations and/or critical infrastructure that appear to be lacking in adequate cover and note on Stage 1 sheet.
2. **LGRC -**Identify at-risk bushfire areas with vulnerable populations using the attached LOCAL GOVERNMENT RESPONSE CRITERIA (Table 2). Document briefly on the Stage 1 sheet.
3. **Incident History** -Map out and mark the number and extent of actual level 1 and level 2 wildfire incidents in the immediate vicinity attended or experienced in past 3 years and/or 5 years (if 5 years is significantly different from 3 year profile). Use Westplan –Wildfire to determine level and FIRS to supply latest data.
4. **Brigade Profile(s)-** Identify risks (if any) inherent in the local BFB Brigades. Consider training, available personnel, travel time, abilities/ages of volunteers.
5. **Available Resources -**List available resources, e.g. volunteers, appliances, tankers, low loaders and graders. etc. Identify whether there are additional resources available elsewhere that may assist during high-risk periods. Document potential impact of each.

Stage 2

With the information provide by Stage 1, use Table 4 to identify risk levels for the communities and/or areas considered at- risk. If Risk Level is 6 or above, consider options for risk reduction/treatment in Stage 3.

Stage 3

Prioritised Risk Areas Briefly state the nature of the risk and the area/population affected.
Risk Reduction/Controls Consider potential methods for risk reduction in general (fuel load management, education, resources available nearby, different appliance, etc.). Is there water carrier capacity available in the vicinity? Consider DEC, private contractors, etc. Identify and document. Document methods considered, potential impact of each, ability of implementing these controls and intent to employ each method. The person responsible for the implementation should be identified in the final column.
Potential Efficiencies Is there an opportunity or need to combine/collocate any units? Could swapping appliances with another area improve response abilities? Discuss and identify this, including implications.

Stage 4

Review the high risk communities and/or areas identified in Stage 3. Document the new Level of Risk following the introduction of the strategies and processes identified in Stage 2 and detailed on the Risk Treatment Schedule. If Risk Level remains at 6 or above, document controls and treatments for implementation and calculate new Level of Risk.

Stage 5

- Identify additional resources required to provide minimum level of protection to the community in case of Level 1 incident and prioritise. If additional resources are outside the ability of the LGA to source locally e.g. BA, Appliance, Building, then document on ESL Grant Request form. Consider appliance type most suitable to meet Level 1 fire response

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Resource to RiskSummary

criteria (see Table 1) and available trained personnel and infrastructure (has Breathing Apparatus, if identified, met criteria in Table 3)?

- Ensure the attached R2R Summary identifies the at-risk population and geographical area and provides supporting information for alternative controls and treatments considered.
- Attach BFS isochrone map(s) identifying the area concerned.
- Identify consequence of not obtaining capital articles on ESL Grant Request form and describe what interim measures are/will be put in place to minimise risk.
- Refer to Fit for Purpose assessments for identified building replacement priorities and include in ESL Grant Request form.
-

Stage 1- Risk Assessment Process	
Method	**Notes**
1. Bushfire Risk Areas that may have inadequate cover to protect life and property (use BFTA maps and Travel Time maps to assist with identification of these locations)	**Population >1500 and growing very quickly,** **Isochrone: Map shows present turnout would be 10-30 minutes, plus 10-15 minutes to get to appliance.** **Western end, Chedaring Rd is well outside of the 30 minute turnout and consideration should be given to putting a 1.4 at Wundowie. Volunteer Fire and Rescue Brigade in Wundowie as a joint location.** **Map show heavy vegetation** **Rural blocks 12,25,50,1000 hectares** **Usage, small mixed farming/hobby farms/small village** **Vegetation; Jarrah/marri/wandoo/Dryander forest** **Water; minimal supplies** **Bakers Hill, minimum hydrants, standpipe** **Carlin Valley sub division reticulated hydrants** **Koojedda sub division reticulated hydrants** **Brookwood estate reticulated hydrants** **VERY HIGH BUSH FIRE RISK**
2. Local Government Response Criteria	Urban Defensive Up to two fire fighting appliances on site for wildfire in 1 hour(30 + kms between services) 1 fire firefighter appliance on site for property threat in 1 hour Specialist Units (ICV on site within 6 hours)
3. Incident History	2006/2007 32 2007/2008 18 2008/2009 28 2009/2010 34 2010/2011 16 Up to 18/01/2011
4. Brigade Profile	Urban Defensive

Resource to RiskSummary

	66 members, majority over 40 Training satisfactory for level 1, and low level2 wildfire No structural FF's. Brigade should move towards Urban Offensive with BA over next 3 years, this will require extensive building upgrade. Training room, BA cleaning area, PPC storage room, drying room etc Minimal number of FF available for IMT **2 Bay shed with minimum conveniences, requires extension in the way of a training room.**
5. Available Resources	Appliance types: Other 2.4 R Water tankers, Wundowie Water Cartage (Maybe available) Lt Loaders/graders from the Shire (Minimum of 30-60 minutes)

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Bakers Hill area a wildfire – ALL MOST CERTAIN	**5**	**4**	**20**
Bakers Hill area a structural fire –ALL MOST CERTAIN	**5**	**4**	**20**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
1. Turnout time to western boundary of the district is outside acceptable times	Introduce a 1.4 R for the Bakers Hill Bush Fire district via duel registration at Wundowie Volunteer Fire and Rescue Staation	High	High	Yes	Funding
2. Shortage of water	Regional water tanker for the Shire of Northam at Inkpen Bush Fire Brigade	High	High	Yes	

Resource to RiskSummary

3. Reserves/UCL	Fuel reduction strategies	High	Medium depending on $		Funding
4. Structural fire fighting	Upgrade fire appliance to 2.4 Urban with Breathing and relevant building upgrade	Medium	High		Funding

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Bakers Hill area	**Promote hazard reduction and management**	**5**	**5**	**25**

Resource to RiskSummary

Stakeholder Name:_____ _____Title:_____ Signature:

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Resource to RiskSummary

Tables

TABLE 1- APPLIANCE TYPES

POPULATION CENTRE	CHARACTERISTICS	APPLIANCE TYPES	COMMENTS
Scattered	√Individual homes and out buildings √Situated between settlements or rural centres ☐ Government Services at settlements and rural centres ☐ Little public infrastructure on properties √Wildfire risk	Rural Series LT, R1.4, R2.4, R4.4 Broadacre	
Settlement (up to 500 residents)	√Clusters of homes and buildings in central location √Basic infrastructure for day to day living √School/Store and supply facility √Wildfire risk		Larger Tanker Capacity should be considered in support of settlements
Rural Centre or Outer Urban	√Large clusters of homes and buildings ☐ Infrastructure in place for limited business support ☐ Shopping sites, welfare facilities, school, medical service √Major roads and airfield, Light Industrial area √Wildfire risk, some complex structures	Urban Series 2.4 U 3.4 U	Additional Light Tanker support for urban wildfire interaction to be justified Breathing Apparatus only as per assessment

Table 2 - LOCAL GOVERNMENT RESPONSE CRITERIA

Resource to RiskSummary

LOCAL GOVERNMENT RESPONSE CRITERIA

KEY= *Property under threat from wildfire # Turnout time to incident. + Aircraft and/or appropriate machinery where required

BREATHING APPARATUS ALLOCATION CRITERIA (PLEASE TICK)	BREATHING APPARATUS PREREQUISITES (PLEASE TICK)
Appliance:**Urban Series U2.4/3.4** Town Characteristics: √**Population - 700 or more;** √**More than 300 houses;** ☐ **A hospital and/or some aged care facilities;** ☐ **More than 5 public buildings;** ☐ **Industrial area(s) with heavy industry capacity and more than 5 sites;** √**Fuel storage areas and or petrol stations;** ☐ **5 or more sites storing hazardous chemicals;** √**One or more schools with at least 100 pupils;** √**A number of retail shops or outlets;** ☐ **Office or other commercial developments; and** ☐ **An airport, a port facility or large transport depot or facilities;** ☐ **No breathing apparatus support within approximately 30 minutes on request**	√Brigade and Local Government register agreement to provide service ☐ Brigade has an appropriate urban appliance √Brigade has demonstrated a 24/7 roster with a minimum 4 person turn out ☐ Station has appropriate BA maintenance and cleaning facilities √Brigade members willing to meet fitness requirements and facial hair management √Brigade members trained to fire-fighter (1-12) √Brigade members trained in hot fire √Brigade members trained in oxygen resuscitation techniques ☐ Brigade members trained to Breathing Apparatus *requires issuing of - level 2 PPE, BA, Oxy Viva

TABLE 3- BREATHING APPARATUS CHECKLISTS

TABLE 4 - LIKELIHOOD AND CONSEQUENCES – (EMERGENCY MANAGEMENT AUSTRALIA 2004)

LIKELIHOOD			CONSEQUENCE- HUMAN LIFE AND PROPERTY
Rare	1	Less than once in 15 years	**2. Minor –** No fatalities.Small number of minor injuries.First aid treatment may berequired.No people are displaced. Little or no personal supportrequired (support not monetary ormaterial). Inconsequential or no damage **3. Moderate-** Medical treatment required but nofatalities. Some hospitalisation.Localised displacement of peoplewho return within 24 hours.Personal support satisfied throughlocal arrangements. Local damage, rectified by routine arrangements. Community functioning with someinconvenience. **4. Major –** Possible fatalities.Extensive injuries, significanthospitalisation.Large number displaced (morethan 24 hours duration). Extensive resources required forpersonal support.Significant damage that requiresexternal resources. Community onlypartially functioning, some servicesunavailable. **5. Catastrophic –** Significant fatalities.Large number of severe injuries.Extended and large numberrequiring hospitalisation.General and widespreaddisplacement for extendedduration.Extensive damage.Extensive personal support.Community unable to functionwithout significant support.
Unlikely	2	At least once in 10 years	
Moderate	3	At least once in 3 years	
Likely	4	At least once per year	
Almost Certain	5	More than once per year	

Resource to RiskSummary

LGA Name: The Shire of Northam

Name of Assessor: Mincherton/McQuistan Date: January 2011

FESA Resource to Risk

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Clackline/Muresk Bush Fire Brigade

Resource to RiskSummary

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Resource to RiskSummary

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-

Stage 1- Risk Assessment Process	
Method	**Notes**
1. Bushfire Risk Areas that may have inadequate cover to protect life and property (use BFTA maps and Travel Time maps to assist with identification of these locations)	**Population >500 and growing slowly** **Isochrone: Map shows present turnout would be 10-30 minutes, plus 10-15 minutes to get to appliance.** **No appliance at the village of Clackline** **Slip-on at Muresk College, delayed turnout approximately 1 hour>** **Private LT at Spencers Brook, loosely affiliated with Clackline/Muresk Bush Fire Brigade (Not agreed position)** **Clackline/Muresk Shed, Tighe Road, Warranine.** **2.4 Rural** **LT Bravo** **Smith Road Shed** **LT Alphais on present replacement for a 1.4** **Map shows heavy vegetation** **Rural blocks 12,25,50,1000 hectares** **Usage, small mixed farming/Broadacre/hobby farms/small village, Clackline and Spencer Brook** **Vegetation; Jarrah/marri/wandoo/Dryander forest moving into york/salmon gum, jam vegetation** **Water; minimal supplies** **Some hydrants Spencers Brook settlement** **VERY HIGH BUSH FIRE RISK**
2. Local Government Response Criteria	Rural Defensive Up to two fire fighting appliances on site for wildfire in 1 hour(30 + kms between services) 1 fire firefighter appliance on site for property threat in 1 hour Specialist Units (ICV on site within 6 hours)
3. Incident History	2006/2007 30 2007/2008 22 2008/2009 25

Resource to RiskSummary

	2009/2010 20 2010/2011 18 Up to 18/01/2011
4. Brigade Profile	Rural Defensive 50 members, majority over 50 Training satisfactory for level 1, and low level2 wildfire No structural FF's Minimal number of FF available for IMT **New 2 Bay shed with minimum conveniences, requires extension in the way of a training room.**
5. Available Resources	Appliance types: Other 2.4 R Water tankers, Wundowie Water Cartage (Maybe available) LTBravo or a tanker from Northam (Minimum 1 hour) LTAlpha being replaced with 1.4Loaders/graders from the Shire (Minimum of 30-60 minutes) Back up from Northam Volunteer FRS for structural (30 minutes)

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Clackline/Muresk area a wildfire – ALL MOST CERTAIN	**5**	**4**	**20**
Clackline/Muresk area a structural fire –ALL MOST CERTAIN	**4**	**4**	**16**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
1. Shortage of water	Regional water tanker for the Shire of Northam at Inkpen Bush Fire Brigade	High	High	Yes	

Resource to RiskSummary

2. Reserves/UCL	Fuel reduction strategies	High	Medium depending on $		Funding
3.Due to geographical layout the following needs to be considered and developed over the 5 years	Smith Road LT on the Northern side of the Great Eastern Highway should be considered in anew geographical fire district with further subdivision developments in the Egoline and Bailey Farm area of the Northam/Toodyay road. (5 to 10 years) The private Spencer Brooks Brigade indirectly assisted by the Clackline/Muresk Brigade should be considered for 1.4 R. The change in the Muresk Agriculture Facility and the availability of the slip-on. Adds extra risk to this area.	Low High	Medium High	 Yes	Shire to developed further proposal Funding

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Clackline/Muresk area	**Promote hazard reduction and management**	**5**	**5**	**25**

Resource to RiskSummary

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Resource to RiskSummary

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Settlement (up to 500 residents)	Clusters of homes and buildings in central location Basic infrastructure for day to day living √School/Store and supply facility √Wildfire risk		Larger Tanker Capacity should be considered in support of settlements
Rural Centre or Outer Urban	Large clusters of homes and buildings ☐ Infrastructure in place for limited business support ☐ Shopping sites, welfare facilities, school, medical service √Major roads and airfield, Light Industrial area √Wildfire risk, some complex structures	Urban Series 2.4 U 3.4 U	Additional Light Tanker support for urban wildfire interaction to be justified Breathing Apparatus only as per assessment

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LGA Name: The Shire of Northam

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FESA Resource to Risk

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Linton Mincherton

Grass Valley Bush Fire Brigade

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Method	**Notes**
1. Bushfire Risk Areas that may have inadequate cover to protect life and property (use BFTA maps and Travel Time maps to assist with identification of these locations)	**Population > 500,** **Isochrone: Map shows present turnout would be 10-30 minutes, plus 10-15 minutes to get to appliance.** **Map show heavy vegetation** **Rural blocks 12,25,50,1000 hectares** **Usage, small madadeixed farming/hobby farms/broad acre farming** **Vegetation; Jarrah/marri/wandoo/Dryander forest** **This area is the beginning of the broad acre farming and hence vegetation is less and large pasture areas, fires are more controllable** **Water; minimal supplies** **Broad acre fire rating** **2 settlements Grass Valley and Seabrook**
2. Local Government Response Criteria	Rural Up to two fire fighting appliances on site for wildfire in 1 hour(30 + kms between services) 1 fire firefighter appliance on site for property threat in 1 hour Specialist Units (ICV on site within 6 hours)
3. Incident History	2006/2007 12 2007/2008 15 2008/2009 14 2009/2010 15 2010/2011 8 Up to 18/01/2011
4. Brigade Profile	Rural 68 members, majority over 45 Training satisfactory for level 1, and low level2 wildfire No structural FF's Minimal number of FF available for IMT

Resource to RiskSummary

	Present shed being extended by Brigade, either for a second appliance 1.4 R or as training area. Further facility development required.
5. Available Resources	Appliance types: Scattered Other 3.4 R Water tankers from Northam Water Cartage (Maybe available) Loaders/graders from the Shire (Minimum of 30-60 minutes)

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Grass Valley area a wildfire – ALL MOST CERTAIN	**5**	**3**	**15**
Grass Valleyarea structural fire - LIKELEY	**3**	**3**	**9**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
1. Light Tanker	Due to delayed back up from nearest Brigades Southern Brook and Irish Town a 1.4 R is urgently required to assist the 3.4. Very dependent on farmer response	High	High	Yes	Funding
2. Shortage of water	Regional water tanker for the Shire of Northam at Inkpen Bush Fire Brigade	High	High	Yes	Funding

Resource to RiskSummary

3. Reserves/UCL/Water Corp land	Fuel reduction strategies	High	Medium depending on $		UCL Funding

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Grass Valley BF district	**Promote hazard reduction and management**	**5**	**5**	**25**

Resource to RiskSummary

Stakeholder Name:_____ _____Title:_____ Signature:
Stakeholder Name:_____ _____Title:_____ Signature:

Once completed, please forwardcopies of this form to the Local Government Authority and the FESA Regional office.

Resource to RiskSummary

Tables

TABLE 1- APPLIANCE TYPES

POPULATION CENTRE	CHARACTERISTICS	APPLIANCE TYPES	COMMENTS
Scattered	√Individual homes and out buildings √Situated between settlements or rural centres ☐ Government Services at settlements and rural centres √Little public infrastructure on properties √Wildfire risk	Rural Series LT, R1.4, R2.4, R4.4 Broadacre	
Settlement (up to 500 residents) **Grass Valley** **Seabrook**	√Clusters of homes and buildings in central location ☐ Basic infrastructure for day to day living ☐ School/Store and supply facility √Wildfire risk		Larger Tanker Capacity should be considered in support of settlements
Rural Centre **or** **Outer Urban**	☐ Large clusters of homes and buildings ☐ Infrastructure in place for limited business support ☐ Shopping sites, welfare facilities, school, medical service ☐ Major roads and airfield, Light Industrial area ☐ Wildfire risk, some complex structures	Urban Series 2.4 U 3.4 U	Additional Light Tanker support for urban wildfire interaction to be justified Breathing Apparatus only as per assessment

Table 2 - LOCAL GOVERNMENT RESPONSE CRITERIA

Resource to RiskSummary

LOCAL GOVERNMENT RESPONSE CRITERIA

KEY= *Property under threat from wildfire # Turnout time to incident. + Aircraft and/or appropriate machinery where required

BREATHING APPARATUS ALLOCATION CRITERIA (PLEASE TICK)	BREATHING APPARATUS PREREQUISITES (PLEASE TICK)
Appliance:**Urban Series U2.4/3.4** Town Characteristics: ☐ **Population - 700 or more;** ☐ **More than 300 houses;** ☐ **A hospital and/or some aged care facilities;** ☐ **More than 5 public buildings;** ☐ **Industrial area(s) with heavy industry capacity and more than 5 sites;** ☐ **Fuel storage areas and or petrol stations;** ☐ **5 or more sites storing hazardous chemicals;** ☐ **One or more schools with at least 100 pupils;** ☐ **A number of retail shops or outlets;** ☐ **Office or other commercial developments; and** ☐ **An airport, a port facility or large transport depot or facilities;** ☐ **No breathing apparatus support within approximately 30 minutes on request**	☐ Brigade and Local Government register agreement to provide service ☐ Brigade has an appropriate urban appliance ☐ Brigade has demonstrated a 24/7 roster with a minimum 4 person turn out ☐ Station has appropriate BA maintenance and cleaning facilities ☐ Brigade members willing to meet fitness requirements and facial hair management ☐ Brigade members trained to fire-fighter (1-12) ☐ Brigade members trained in hot fire ☐ Brigade members trained in oxygen resuscitation techniques ☐ Brigade members trained to Breathing Apparatus *requires issuing of - level 2 PPE, BA, Oxy Viva

TABLE 3- BREATHING APPARATUS CHECKLISTS

TABLE 4 - LIKELIHOOD AND CONSEQUENCES – (EMERGENCY MANAGEMENT AUSTRALIA 2004)

LIKELIHOOD			CONSEQUENCE- HUMAN LIFE AND PROPERTY
Rare	1	Less than once in 15 years	**2. Minor –** No fatalities.Small number of minor injuries.First aid treatment may berequired.No people are displaced. Little or no personal supportrequired (support not monetary ormaterial). Inconsequential or no damage **3. Moderate-** Medical treatment required but nofatalities. Some hospitalisation.Localised displacement of peoplewho return within 24 hours.Personal support satisfied throughlocal arrangements. Local damage, rectified by routine arrangements. Community functioning with someinconvenience. **4. Major –** Possible fatalities.Extensive injuries, significanthospitalisation.Large number displaced (morethan 24 hours duration). Extensive resources required forpersonal support.Significant damage that requiresexternal resources. Community onlypartially functioning, some servicesunavailable. **5. Catastrophic –** Significant fatalities.Large number of severe injuries.Extended and large numberrequiring hospitalisation.General and widespreaddisplacement for extendedduration.Extensive damage.Extensive personal support.Community unable to functionwithout significant support.
Unlikely	2	At least once in 10 years	
Moderate	3	At least once in 3 years	
Likely	4	At least once per year	
Almost Certain	5	More than once per year	

Resource to RiskSummary

LGA Name: The Shire of Northam

Name of Assessor: Mincherton/McQuistan Date: January 2011

FESA Resource to Risk

Guide and Summary Sheets

Linton Mincherton

Inkpen Bush Fire Brigade

Resource to RiskSummary

Guide to using the FESA R2R Process and Summary Sheets

The R2R Process should be conducted every three years (more often if significant changes occur) for each Local Government Authority. Ideally, this exercise should be scheduled so that it can be attended by theLGA officer responsible for community emergency management coordination (CFM, CESM or similar), FESA District Manager and any other significant contributors. The R2R assessment is a useful process for considering the strengths and opportunities that exist in and around a community, as well as revealing threats and weaknesses through risk assessment, analysis and treatments. The R2R process is one where fair distribution and strategic placement of regional resources are considered as the primary consideration, with an emphasis on partnership and shared support among and between communities. The FESA Regional Director will be responsible for making prioritised and evidence-based recommendations to the ESL Capital Grants Committee, based on the collective R2R assessments across the region. The R2R is *not* intended to be a comprehensive catalogue of all resources or risks in an LGA. It is a process that develops a management plan for an identified risk that is currently considered to be inadequately treated. The information generated by the process should provide a firm foundation for a request for resources to the ESL Grants Committee.

Stage 1

1. **Bushfire Risk and Coverage –**Obtain and analyse the Bushfire Threat Analysis (BFTA) maps from Bush Fire & Environmental Protection, Research & Liaison. Print out the isochrone maps for the area being analysed(maps available through FESA District Managers at http://extranet/sites/volunteers/members/GIS/Pages/TravelTimeMapping.aspx). To get a complete picture, it may be necessary to also print out adjoining areas' isochrone maps and confirm the accuracy of the locations of existing BFS appliances on the maps[1]. Identify at-risk populated locations and/or critical infrastructure that appear to be lacking in adequate cover and note on Stage 1 sheet.
2. **LGRC -**Identify at-risk bushfire areas with vulnerable populations using the attached LOCAL GOVERNMENT RESPONSE CRITERIA (Table 2). Document briefly on the Stage 1 sheet.
3. **Incident History** -Map out and mark the number and extent of actual level 1 and level 2 wildfire incidents in the immediate vicinity attended or experienced in past 3 years and/or 5 years (if 5 years is significantly different from 3 year profile). Use Westplan –Wildfire to determine level and FIRS to supply latest data.
4. **Brigade Profile(s)-** Identify risks (if any) inherent in the local BFB Brigades. Consider training, available personnel, travel time, abilities/ages of volunteers.
5. **Available Resources -**List available resources, e.g. volunteers, appliances, tankers, low loaders and graders. etc. Identify whether there are additional resources available elsewhere that may assist during high-risk periods. Document potential impact of each.

Stage 2

With the information provide by Stage 1, use Table 4 to identify risk levels for the communities and/or areas considered at- risk. If Risk Level is 6 or above, consider options for risk reduction/treatment in Stage 3.

Stage 3

Prioritised Risk Areas Briefly state the nature of the risk and the area/population affected.
Risk Reduction/Controls Consider potential methods for risk reduction in general (fuel load management, education, resources available nearby, different appliance, etc.). Is there water carrier capacity available in the vicinity? Consider DEC, private contractors, etc. Identify and document. Document methods considered, potential impact of each, ability of implementing these controls and intent to employ each method. The person responsible for the implementation should be identified in the final column.
Potential Efficiencies Is there an opportunity or need to combine/collocate any units? Could swapping appliances with another area improve response abilities? Discuss and identify this, including implications.

Stage 4

Review the high risk communities and/or areas identified in Stage 3. Document the new Level of Risk following the introduction of the strategies and processes identified in Stage 2 and detailed on the Risk Treatment Schedule. If Risk Level remains at 6 or above, document controls and treatments for implementation and calculate new Level of Risk.

Stage 5

- Identify additional resources required to provide minimum level of protection to the community in case of Level 1 incident and prioritise. If additional resources are outside the ability of the LGA to source locally e.g. BA, Appliance, Building, then document on ESL Grant Request form. Consider appliance type most suitable to meet Level 1 fire response

[1] In some areas the data is missing or outdated. Please contact GIS in Perth to update this information, preferably with coordinates from a GPS device. The updated map should be available within 2 weeks.

Resource to RiskSummary

criteria (see Table 1) and available trained personnel and infrastructure (has Breathing Apparatus, if identified, met criteria in Table 3)?

- Ensure the attached R2R Summary identifies the at-risk population and geographical area and provides supporting information for alternative controls and treatments considered.
- Attach BFS isochrone map(s) identifying the area concerned.
- Identify consequence of not obtaining capital articles on ESL Grant Request form and describe what interim measures are/will be put in place to minimise risk.
- Refer to Fit for Purpose assessments for identified building replacement priorities and include in ESL Grant Request form.
-

Stage 1- Risk Assessment Process	
Method	**Notes**
1. Bushfire Risk Areas that may have inadequate cover to protect life and property (use BFTA maps and Travel Time maps to assist with identification of these locations)	**Population >700,** **Isochrone: Map shows present turnout would be 10-30 minutes, plus 10-15 minutes to get to appliance.** **Map show heavy vegetation** **Rural blocks 12,25,50,1000 hectares** **Usage, small mixed farming/hobby farms** **Vegetation; Jarrah/marri/wandoo/Dryander forest** **Water; minimal supplies** **VERY HIGH BUSH FIRE RISK**
2. Local Government Response Criteria	Rural Up to two fire fighting appliances on site for wildfire in 1 hour(30 + kms between services) 1 fire firefighter appliance on site for property threat in 1 hour Specialist Units (ICV on site within 6 hours
3. Incident History	2006/2007 10 2007/2008 6 2008/2009 13 2009/2010 7 2010/2011 7 Up to 18/01/2011
4. Brigade Profile	Rural 66 members, majority over 55 Training satisfactory for level 1, and low level2 wildfire No structural FF's Minimal number of FF available for IMT **NO BRIGADE APPLIANCE SHED. 3 bay shed required with facilities, land being acquired 2011, should be available 2012,**

Resource to RiskSummary

	requiring sub division approval.
5. Available Resources	Appliance types: Scattered Other 2.4 R Water tankers, Wundowie Water Cartage (Maybe available) 1.4R Loaders/graders from the Shire (Minimum of 30-60 minutes) Brigade Owned: 2 x 2.4R (Old Inter 1970's) Been held by the Brigade due to the shortage of water. Mobile pump required as only available water is from dams, when available.

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Inkpen area a wildfire – ALL MOST CERTAIN	**5**	**4**	**20**
Inkpen area structural fire - LIKELEY	**4**	**4**	**16**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
1. Shortage of water	Regional water tanker for the Shire of Northam at Inkpen Bush Fire Brigade	High	High	Yes	Funding
2. Reserves/UCL/Water Corp land	Fuel reduction strategies	High	Medium depending on $		UCL Funding

Resource to RiskSummary

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Inkpen BF district	**Promote hazard reduction and management**	**5**	**5**	**25**

Stakeholder Name:_____ _____Title:_____ Signature:

Resource to RiskSummary

Stakeholder Name:_____ _____Title:_____ Signature:

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Resource to RiskSummary

Tables

TABLE 1- APPLIANCE TYPES

POPULATION CENTRE	CHARACTERISTICS	APPLIANCE TYPES	COMMENTS
Scattered	☐ Individual homes and out buildings ☐ Situated between settlements or rural centres ☐ Government Services at settlements and rural centres ☐ Little public infrastructure on properties ☐ Wildfire risk	Rural Series LT, R1.4, R2.4, R4.4 Broadacre	
Settlement (up to 500 residents)	☐ Clusters of homes and buildings in central location ☐ Basic infrastructure for day to day living ☐ School/Store and supply facility ☐ Wildfire risk		Larger Tanker Capacity should be considered in support of settlements
Rural Centre or Outer Urban	☐ Large clusters of homes and buildings ☐ Infrastructure in place for limited business support ☐ Shopping sites, welfare facilities, school, medical service ☐ Major roads and airfield, Light Industrial area ☐ Wildfire risk, some complex structures	Urban Series 2.4 U 3.4 U	Additional Light Tanker support for urban wildfire interaction to be justified Breathing Apparatus only as per assessment

Table 2 - LOCAL GOVERNMENT RESPONSE CRITERIA

Resource to RiskSummary

LOCAL GOVERNMENT RESPONSE CRITERIA

KEY= *Property under threat from wildfire # Turnout time to incident. + Aircraft and/or appropriate machinery where required

BREATHING APPARATUS ALLOCATION CRITERIA (PLEASE TICK)	BREATHING APPARATUS PREREQUISITES (PLEASE TICK)
Appliance:**Urban Series U2.4/3.4** Town Characteristics: ☐ **Population - 700 or more;** ☐ **More than 300 houses;** ☐ **A hospital and/or some aged care facilities;** ☐ **More than 5 public buildings;** ☐ **Industrial area(s) with heavy industry capacity and more than 5 sites;** ☐ **Fuel storage areas and or petrol stations;** ☐ **5 or more sites storing hazardous chemicals;** ☐ **One or more schools with at least 100 pupils;** ☐ **A number of retail shops or outlets;** ☐ **Office or other commercial developments; and** ☐ **An airport, a port facility or large transport depot or facilities;** ☐ **No breathing apparatus support within approximately 30 minutes on request**	☐ Brigade and Local Government register agreement to provide service ☐ Brigade has an appropriate urban appliance ☐ Brigade has demonstrated a 24/7 roster with a minimum 4 person turn out ☐ Station has appropriate BA maintenance and cleaning facilities ☐ Brigade members willing to meet fitness requirements and facial hair management ☐ Brigade members trained to fire-fighter (1-12) ☐ Brigade members trained in hot fire ☐ Brigade members trained in oxygen resuscitation techniques ☐ Brigade members trained to Breathing Apparatus *requires issuing of - level 2 PPE, BA, Oxy Viva

TABLE 3- BREATHING APPARATUS CHECKLISTS

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Unlikely	2	At least once in 10 years	
Moderate	3	At least once in 3 years	
Likely	4	At least once per year	
Almost Certain	5	More than once per year	

Resource to RiskSummary

FESA
Fire & Emergency Services Authority of Western Australia

LGA Name: The Shire of Northam

Name of Assessor: Mincherton/McQuistan Date: January 2011

FESA Resource to Risk

Guide and Summary Sheets

Linton Mincherton

Irish Town Bush Fire Brigade

Resource to RiskSummary

Guide to using the FESA R2R Process and Summary Sheets

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1. **Bushfire Risk and Coverage –**Obtain and analyse the Bushfire Threat Analysis (BFTA) maps from Bush Fire & Environmental Protection, Research & Liaison. Print out the isochrone maps for the area being analysed(maps available through FESA District Managers at http://extranet/sites/volunteers/members/GIS/Pages/TravelTimeMapping.aspx). To get a complete picture, it may be necessary to also print out adjoining areas' isochrone maps and confirm the accuracy of the locations of existing BFS appliances on the maps[1]. Identify at-risk populated locations and/or critical infrastructure that appear to be lacking in adequate cover and note on Stage 1 sheet.
2. **LGRC -**Identify at-risk bushfire areas with vulnerable populations using the attached LOCAL GOVERNMENT RESPONSE CRITERIA (Table 2). Document briefly on the Stage 1 sheet.
3. **Incident History** -Map out and mark the number and extent of actual level 1 and level 2 wildfire incidents in the immediate vicinity attended or experienced in past 3 years and/or 5 years (if 5 years is significantly different from 3 year profile). Use Westplan –Wildfire to determine level and FIRS to supply latest data.
4. **Brigade Profile(s)-** Identify risks (if any) inherent in the local BFB Brigades. Consider training, available personnel, travel time, abilities/ages of volunteers.
5. **Available Resources -**List available resources, e.g. volunteers, appliances, tankers, low loaders and graders. etc. Identify whether there are additional resources available elsewhere that may assist during high-risk periods. Document potential impact of each.

Stage 2

With the information provide by Stage 1, use Table 4 to identify risk levels for the communities and/or areas considered at- risk. If Risk Level is 6 or above, consider options for risk reduction/treatment in Stage 3.

Stage 3

Prioritised Risk Areas Briefly state the nature of the risk and the area/population affected.
Risk Reduction/Controls Consider potential methods for risk reduction in general (fuel load management, education, resources available nearby, different appliance, etc.). Is there water carrier capacity available in the vicinity? Consider DEC, private contractors, etc. Identify and document. Document methods considered, potential impact of each, ability of implementing these controls and intent to employ each method. The person responsible for the implementation should be identified in the final column.
Potential Efficiencies Is there an opportunity or need to combine/collocate any units? Could swapping appliances with another area improve response abilities? Discuss and identify this, including implications.

Stage 4

Review the high risk communities and/or areas identified in Stage 3. Document the new Level of Risk following the introduction of the strategies and processes identified in Stage 2 and detailed on the Risk Treatment Schedule. If Risk Level remains at 6 or above, document controls and treatments for implementation and calculate new Level of Risk.

Stage 5

- Identify additional resources required to provide minimum level of protection to the community in case of Level 1 incident and prioritise. If additional resources are outside the ability of the LGA to source locally e.g. BA, Appliance, Building, then document on ESL Grant Request form. Consider appliance type most suitable to meet Level 1 fire response

[1] In some areas the data is missing or outdated. Please contact GIS in Perth to update this information, preferably with coordinates from a GPS device. The updated map should be available within 2 weeks.

Resource to RiskSummary

criteria (see Table 1) and available trained personnel and infrastructure (has Breathing Apparatus, if identified, met criteria in Table 3)?

- Ensure the attached R2R Summary identifies the at-risk population and geographical area and provides supporting information for alternative controls and treatments considered.
- Attach BFS isochrone map(s) identifying the area concerned.
- Identify consequence of not obtaining capital articles on ESL Grant Request form and describe what interim measures are/will be put in place to minimise risk.
- Refer to Fit for Purpose assessments for identified building replacement priorities and include in ESL Grant Request form.
-

Stage 1- Risk Assessment Process	
Method	**Notes**
1. Bushfire Risk Areas that may have inadequate cover to protect life and property (use BFTA maps and Travel Time maps to assist with identification of these locations)	**Population < 500,** **Isochrone: Map shows present turnout would be 10-30 minutes, plus 10-15 minutes to get to appliance.** **Map shows broad acre farming** **Rural blocks 12,25,50,1000 hectares** **Usage, small mixed farming/hobby farms/broad acre farming** **Vegetation; York/salmon gum, jam vegetation** **This area is the beginning of the broad acre farming and hence vegetation is less and large pasture areas, fires are more controllable** **Water; minimal supplies** **Broad acre fire rating**
2. Local Government Response Criteria	Rural Up to two fire fighting appliances on site for wildfire in 1 hour(30 + kms between services) 1 fire firefighter appliance on site for property threat in 1 hour Specialist Units (ICV on site within 6 hours
3. Incident History	2006/2007 4 2007/2008 4 2008/2009 11 2009/2010 9 2010/2011 9 Up to 18/01/2011
4. Brigade Profile	Rural 94 members, majority over 55 Training satisfactory for level 1, and low level2 wildfire No structural FF's Minimal number of FF available for IMT

Resource to RiskSummary

	Fire shed at Irish Town hall for a 2.4 R & LT. Building upgrade required in the next 5 years **Other LT privately housed at Dave Russell's on the western side of district**
5. Available Resources	Appliance types: Scattered Other 2.4 Rat Irish TownWater tankers from Northam Water Cartage (Maybe available) LT at Irish Town Loaders/graders from the Shire (Minimum of 30-60 minutes) LT at Dave Russell's

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Irish Town area a wildfire – ALL MOST CERTAIN	**5**	**3**	**15**
Irish Town area structural fire - LIKELEY	**3**	**3**	**9**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
1. Shortage of water	Regional water tanker for the Shire of Northam at Inkpen Bush Fire Brigade	High	High	Yes	Funding
2. Reserves/UCL/Water Corp land	Fuel reduction strategies	High	Medium depending on $		UCL Funding
3. Due to geographical layout and the Avon River		Low	High		Shire to develop further proposal

Resource to RiskSummary

consideration should be given to development of a new Brigade (Smith, Egoline, Bailey) west of the river					

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Irish town BF district	**Promote hazard reduction and management**	**5**	**5**	**25**

Stakeholder Name:_____ _____Title:_____ Signature:

Resource to RiskSummary

Stakeholder Name:_____ _____Title:_____ Signature:

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Resource to RiskSummary

Tables

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POPULATION CENTRE	CHARACTERISTICS	APPLIANCE TYPES	COMMENTS
Scattered	√Individual homes and out buildings ☐ Situated between settlements or rural centres ☐ Government Services at settlements and rural centres ☐ Little public infrastructure on properties √Wildfire risk	Rural Series LT, R1.4, R2.4, R4.4 Broadacre	
Settlement (up to 500 residents)	☐ Clusters of homes and buildings in central location ☐ Basic infrastructure for day to day living ☐ School/Store and supply facility ☐ Wildfire risk		Larger Tanker Capacity should be considered in support of settlements
Rural Centre or Outer Urban	☐ Large clusters of homes and buildings ☐ Infrastructure in place for limited business support ☐ Shopping sites, welfare facilities, school, medical service ☐ Major roads and airfield, Light Industrial area ☐ Wildfire risk, some complex structures	Urban Series 2.4 U 3.4 U	Additional Light Tanker support for urban wildfire interaction to be justified Breathing Apparatus only as per assessment

Table 2 - LOCAL GOVERNMENT RESPONSE CRITERIA

Resource to RiskSummary

LOCAL GOVERNMENT RESPONSE CRITERIA

KEY= *Property under threat from wildfire # Turnout time to incident. + Aircraft and/or appropriate machinery where required

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Appliance:**Urban Series U2.4/3.4** Town Characteristics: ☐ **Population - 700 or more;** ☐ **More than 300 houses;** ☐ **A hospital and/or some aged care facilities;** ☐ **More than 5 public buildings;** ☐ **Industrial area(s) with heavy industry capacity and more than 5 sites;** ☐ **Fuel storage areas and or petrol stations;** ☐ **5 or more sites storing hazardous chemicals;** ☐ **One or more schools with at least 100 pupils;** ☐ **A number of retail shops or outlets;** ☐ **Office or other commercial developments; and** ☐ **An airport, a port facility or large transport depot or facilities;** ☐ **No breathing apparatus support within approximately 30 minutes on request**	☐ Brigade and Local Government register agreement to provide service ☐ Brigade has an appropriate urban appliance ☐ Brigade has demonstrated a 24/7 roster with a minimum 4 person turn out ☐ Station has appropriate BA maintenance and cleaning facilities ☐ Brigade members willing to meet fitness requirements and facial hair management ☐ Brigade members trained to fire-fighter (1-12) ☐ Brigade members trained in hot fire ☐ Brigade members trained in oxygen resuscitation techniques ☐ Brigade members trained to Breathing Apparatus *requires issuing of - level 2 PPE, BA, Oxy Viva

TABLE 3- BREATHING APPARATUS CHECKLISTS

TABLE 4 - LIKELIHOOD AND CONSEQUENCES – (EMERGENCY MANAGEMENT AUSTRALIA 2004)

LIKELIHOOD			CONSEQUENCE- HUMAN LIFE AND PROPERTY
Rare	1	Less than once in 15 years	**2. Minor –** No fatalities.Small number of minor injuries.First aid treatment may berequired.No people are displaced. Little or no personal supportrequired (support not monetary ormaterial). Inconsequential or no damage **3. Moderate-** Medical treatment required but nofatalities. Some hospitalisation.Localised displacement of peoplewho return within 24 hours.Personal support satisfied throughlocal arrangements. Local damage, rectified by routine arrangements. Community functioning with someinconvenience. **4. Major –** Possible fatalities.Extensive injuries, significanthospitalisation.Large number displaced (morethan 24 hours duration). Extensive resources required forpersonal support.Significant damage that requiresexternal resources. Community onlypartially functioning, some servicesunavailable. **5. Catastrophic –** Significant fatalities.Large number of severe injuries.Extended and large numberrequiring hospitalisation.General and widespreaddisplacement for extendedduration.Extensive damage.Extensive personal support.Community unable to functionwithout significant support.
Unlikely	2	At least once in 10 years	
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Almost Certain	5	More than once per year	

Resource to RiskSummary

LGA Name: The Shire of Northam

Name of Assessor: Mincherton/McQuistan Date: January 2011

FESA Resource to Risk

Guide and Summary Sheets

Linton Mincherton

Jennapullin Bush Fire Brigade

Resource to RiskSummary

Guide to using the FESA R2R Process and Summary Sheets

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Stage 1

1. **Bushfire Risk and Coverage –**Obtain and analyse the Bushfire Threat Analysis (BFTA) maps from Bush Fire & Environmental Protection, Research & Liaison. Print out the isochrone maps for the area being analysed(maps available through FESA District Managers at http://extranet/sites/volunteers/members/GIS/Pages/TravelTimeMapping.aspx). To get a complete picture, it may be necessary to also print out adjoining areas' isochrone maps and confirm the accuracy of the locations of existing BFS appliances on the maps[1]. Identify at-risk populated locations and/or critical infrastructure that appear to be lacking in adequate cover and note on Stage 1 sheet.
2. **LGRC -**Identify at-risk bushfire areas with vulnerable populations using the attached LOCAL GOVERNMENT RESPONSE CRITERIA (Table 2). Document briefly on the Stage 1 sheet.
3. **Incident History** -Map out and mark the number and extent of actual level 1 and level 2 wildfire incidents in the immediate vicinity attended or experienced in past 3 years and/or 5 years (if 5 years is significantly different from 3 year profile). Use Westplan –Wildfire to determine level and FIRS to supply latest data.
4. **Brigade Profile(s)-** Identify risks (if any) inherent in the local BFB Brigades. Consider training, available personnel, travel time, abilities/ages of volunteers.
5. **Available Resources -**List available resources, e.g. volunteers, appliances, tankers, low loaders and graders. etc. Identify whether there are additional resources available elsewhere that may assist during high-risk periods. Document potential impact of each.

Stage 2

With the information provide by Stage 1, use Table 4 to identify risk levels for the communities and/or areas considered at- risk. If Risk Level is 6 or above, consider options for risk reduction/treatment in Stage 3.

Stage 3

Prioritised Risk Areas Briefly state the nature of the risk and the area/population affected.
Risk Reduction/Controls Consider potential methods for risk reduction in general (fuel load management, education, resources available nearby, different appliance, etc.). Is there water carrier capacity available in the vicinity? Consider DEC, private contractors, etc. Identify and document. Document methods considered, potential impact of each, ability of implementing these controls and intent to employ each method. The person responsible for the implementation should be identified in the final column.
Potential Efficiencies Is there an opportunity or need to combine/collocate any units? Could swapping appliances with another area improve response abilities? Discuss and identify this, including implications.

Stage 4

Review the high risk communities and/or areas identified in Stage 3. Document the new Level of Risk following the introduction of the strategies and processes identified in Stage 2 and detailed on the Risk Treatment Schedule. If Risk Level remains at 6 or above, document controls and treatments for implementation and calculate new Level of Risk.

Stage 5

- Identify additional resources required to provide minimum level of protection to the community in case of Level 1 incident and prioritise. If additional resources are outside the ability of the LGA to source locally e.g. BA, Appliance, Building, then document on ESL Grant Request form. Consider appliance type most suitable to meet Level 1 fire response

[1] In some areas the data is missing or outdated. Please contact GIS in Perth to update this information, preferably with coordinates from a GPS device. The updated map should be available within 2 weeks.

Resource to RiskSummary

criteria (see Table 1) and available trained personnel and infrastructure (has Breathing Apparatus, if identified, met criteria in Table 3)?

- Ensure the attached R2R Summary identifies the at-risk population and geographical area and provides supporting information for alternative controls and treatments considered.
- Attach BFS isochrone map(s) identifying the area concerned.
- Identify consequence of not obtaining capital articles on ESL Grant Request form and describe what interim measures are/will be put in place to minimise risk.
- Refer to Fit for Purpose assessments for identified building replacement priorities and include in ESL Grant Request form.
-

Stage 1- Risk Assessment Process	
Method	**Notes**
1. Bushfire Risk Areas that may have inadequate cover to protect life and property (use BFTA maps and Travel Time maps to assist with identification of these locations)	**Population <100,** **Isochrone: Map shows present turnout would be 10-30 minutes, plus 10-15 minutes to get to appliance.** **Map show heavy vegetation** **Rural blocks 12,25,50,1000 hectares** **Usage, small mixed farming/hobby farms/mainly broad acre farming** **Vegetation; York/salmon gum, jam vegetation** **This area is the beginning of the broad acre farming and hence vegetation is less and large pasture areas, fires are more controllable** **Water; minimal supplies** **Broad acre fire rating**
2. Local Government Response Criteria	Rural Up to two fire fighting appliances on site for wildfire in 1 hour(30 + kms between services) 1 fire firefighter appliance on site for property threat in 1 hour Specialist Units (ICV on site within 6 hours)
3. Incident History	2006/2007 0 2007/2008 0 2008/2009 0 2009/2010 0 2010/2011 0 Up to 18/01/2011
4. Brigade Profile	Rural 35 members, majority over 30 Training satisfactory for level 1, and low level2 wildfire No structural FF's No FF available for IMT

Resource to RiskSummary

	Farm response only
5. Available Resources	Appliance types: Scattered Farm response Loaders/graders from the Shire (Minimum of 30-60 minutes) Other Water tankers from Northam Water Cartage (Maybe available)

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Jennapullin a wildfire –Unlikely	**2**	**3**	**6**
Southern Brook area structural fire - Moderate	**2**	**3**	**6**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
1. Shortage of water	Regional water tanker for the Shire of Northam at Inkpen Bush Fire Brigade	High	High	Yes	Funding
2. Reserves/UCL/Water Corp land	Fuel reduction strategies	High	Medium depending on $		UCL Funding

Resource to RiskSummary

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Jennapullin BF district	**Promote hazard reduction and management**	**5**	**5**	**25**

Stakeholder Name:_____ _____Title:_____ Signature:

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Resource to RiskSummary

Once completed, please forwardcopies of this form to the Local Government Authority and the FESA Regional office.

Resource to RiskSummary

Tables

TABLE 1- APPLIANCE TYPES

POPULATION CENTRE	CHARACTERISTICS	APPLIANCE TYPES	COMMENTS
Scattered	√Individual homes and out buildings ☐ Situated between settlements or rural centres ☐ Government Services at settlements and rural centres ☐ Little public infrastructure on properties √Wildfire risk	Rural Series LT, R1.4, R2.4, R4.4 Broadacre	
Settlement (up to 500 residents)	☐ Clusters of homes and buildings in central location ☐ Basic infrastructure for day to day living ☐ School/Store and supply facility ☐ Wildfire risk		Larger Tanker Capacity should be considered in support of settlements
Rural Centre or Outer Urban	☐ Large clusters of homes and buildings ☐ Infrastructure in place for limited business support ☐ Shopping sites, welfare facilities, school, medical service ☐ Major roads and airfield, Light Industrial area ☐ Wildfire risk, some complex structures	Urban Series 2.4 U 3.4 U	Additional Light Tanker support for urban wildfire interaction to be justified Breathing Apparatus only as per assessment

Table 2 - LOCAL GOVERNMENT RESPONSE CRITERIA

Resource to RiskSummary

LOCAL GOVERNMENT RESPONSE CRITERIA

KEY= *Property under threat from wildfire # Turnout time to incident. + Aircraft and/or appropriate machinery where required

BREATHING APPARATUS ALLOCATION CRITERIA (PLEASE TICK)	BREATHING APPARATUS PREREQUISITES (PLEASE TICK)
Appliance:**Urban Series U2.4/3.4** Town Characteristics: ☐ **Population - 700 or more;** ☐ **More than 300 houses;** ☐ **A hospital and/or some aged care facilities;** ☐ **More than 5 public buildings;** ☐ **Industrial area(s) with heavy industry capacity and more than 5 sites;** ☐ **Fuel storage areas and or petrol stations;** ☐ **5 or more sites storing hazardous chemicals;** ☐ **One or more schools with at least 100 pupils;** ☐ **A number of retail shops or outlets;** ☐ **Office or other commercial developments; and** ☐ **An airport, a port facility or large transport depot or facilities;** ☐ **No breathing apparatus support within approximately 30 minutes on request**	☐ Brigade and Local Government register agreement to provide service ☐ Brigade has an appropriate urban appliance ☐ Brigade has demonstrated a 24/7 roster with a minimum 4 person turn out ☐ Station has appropriate BA maintenance and cleaning facilities ☐ Brigade members willing to meet fitness requirements and facial hair management ☐ Brigade members trained to fire-fighter (1-12) ☐ Brigade members trained in hot fire ☐ Brigade members trained in oxygen resuscitation techniques ☐ Brigade members trained to Breathing Apparatus *requires issuing of - level 2 PPE, BA, Oxy Viva

TABLE 3- BREATHING APPARATUS CHECKLISTS

TABLE 4 - LIKELIHOOD AND CONSEQUENCES – (EMERGENCY MANAGEMENT AUSTRALIA 2004)

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Resource to RiskSummary

LGA Name: The Shire of Northam

Name of Assessor: Mincherton/McQuistan Date: January 2011

FESA Resource to Risk

Guide and Summary Sheets

Linton Mincherton

Southern Brook Bush Fire Brigade

Resource to RiskSummary

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Resource to RiskSummary

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Resource to RiskSummary

	ESL application for 1 bay shed on the Southern Brook Hall site (2010/11, 2011/12 applications)
5. Available Resources	Appliance types: Scattered Other 1.4 Rat Antonio's propertyWater tankers from Northam Water Cartage (Maybe available) Loaders/graders from the Shire (Minimum of 30-60 minutes)

Stage 2- Communities or areas with Risk Levels at6 or more

Community/Area Name	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Southern Brook a wildfire – Likely	**4**	**3**	**15**
Southern Brook area structural fire - Moderate	**3**	**3**	**9**

Stage 3- Risk Controls and Treatment Schedule

Prioritised Risk Statements	Risk Controls/ Options (e.g. Fuel reduction strategies, Strengthen volunteers capacity, Regional Water Tanker Capacity , Partnership formation, Potential Efficiencies)	Impact (High/ Med/Low)	Feasibility (high/ med/low)	Adopt? (Y/N)	Responsible Person/Position anddate(s) of implementation
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Resource to RiskSummary

Stage 4- Revised Risk Profiles with Proposed Controls and Treatments

Community/Area Name	Proposed Controls (not including major additional ESL resources)	Likelihood 1-5	Consequence 1-5	Level of Risk (Likelihood x Consequence)
Southern Brook BF district	**Promote hazard reduction and management**	**5**	**5**	**25**

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Resource to RiskSummary

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Resource to RiskSummary