

1) Overview

(See PDF 2 for the rules and
3) for the benefits)

A new future "Head-on"

Your initiative to:-

Stop wildfire & mudslide devastation
Adopt & sponsor a Fire-station

**A vision of wildfire & mudslide
free communities**



**Empowered
firefighters**

**Protected
communities**

**Thriving
habitats**

**Living
forests**

*A new vision & reflection of success
The Firefly Innovations*

“Time to stop the devastation & destruction of wildfires”

2017 must never be repeated.

the losses was devastating:-

- Over 9,053 fires
- 1,381,405 acres (5,590.35 km²) destroyed
- 1 firefighter, 45 civilians fatalities
- Over 230,000 people evacuated
- Over 9,800 structures and houses destroyed
- Containment and suppression costs exceeds \$3 Billion
- Total economic loss well above \$13 Billion
- Hundreds of houses and infrastructure lost due to wildfires and follow-on mudslides.
- Major personal losses

1 Background / introduction

Over the last twenty years the fire seasons have become longer, the wildfires ferocity has increased and containment and suppression costs have skyrocketed, including property losses and human lives lost.

All this at a very high business, economic cost, personal costs and major adverse health impacts on First Responders.

Wildfire containment cost now consumes nearly 50% of the total USA forestry budget.

Undermining forestry development and adding substantially to climate change.

Wildfires today are a global international challenge.

Existing equipment and methods, such as used in 2017 fire season, have been developed over many years of practical experience. These methods were substantially enhanced with the introduction of air tankers.

It is however our belief that new **innovations** can be developed to substantially reduce the impact of wildfires & mudslides and ensure that the objectives of the initiative can be achieved.

The overall goal of “Head-on” are to reduce wildfire destruction & the follow on mudslides by over 60 to 80%.

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**Adopt & sponsor a
Fire-station**

Win:- A once in a lifetime “African Family Safari”

2 “Head-on”

1) “Head-on” is a multinational initiative launched by The Firefly Innovations.

2) It is an innovation competition initiative to encourage and promote innovations & the development of new methods and equipment:-

- To stop and reduce the wildfire destruction, including follow-on mudslides and the annual number of wildfires.

3 Objectives and goals

1) To stop and reduce the destruction of wildfires and follow on mudslides risks and destruction up to 80%. The 2018 goal is a 40% reduction, based on 2017 as baseline.



- In this a person has to take into account that wildfires are a natural phenomena and that a substantial percentage of wildfires are ignited by natural factors such as lightning and other natural factors.
- Also policies such as “Let Burn” that is used to balance losses and costs.

However the ferocity and destruction of wildfires can be reduced.

2. To achieve significant cost reductions and improve efficiency (Productivity) with wildfire containment and suppression operations.
3. To create safer and protected communities and habitat.
4. Redirect forestry funding currently used for containment and suppression back for forestry management.

4 How?

1) The key is innovation

“Innovation”

Through the innovative development of new equipment, methods and management in support of fire services.

- From land-use, town-planning, property protection, fire detection, re-action, containment & suppression, victims support and rehabilitation and landslide prevention actions.

2) And collaboration & partnerships across all role-players.

- Communities + Fire services + Business + Government

This includes industry associations, local government through to Federal government.

Via innovation focus groups with Fire-stations as the center.

Covering from land-use, town-planning, property protection, fire detection, re-action, containment & suppression, victims support and rehabilitation and landslide prevention actions.

3) The main elements & focus are:-

3.1) To establish at “Fire-stations”

“First Responder Innovation Hubs”;

Hubs that bring the fire services, communities, business, government and industry organizations together as innovation focus groups.

3.2) The initiative also introduces a role for a volunteer:-

“Community Fire Captain”.

To act as coordinator between the fire services and the communities;- and

To provide a coherent joint approach between the communities and fire-services for the implementation of the regional wildfire prevention zones if not already in place.

3.4) To develop new wildfire containment methods, options and equipment.

5 Always keep in mind

Furthermore a person needs to keep in mind that:-

Each and every wildfire can only effectively be reduced and stop through a combination of:-

- Land use, property planning and prevention options that are applied
- Experienced fire services, that are;-

A number of equipment options & methods have already been identified that could have a substantial impact.

- Equipped and empowered to handle and deal with a magnitude of wildfires.

A combination:- it should also be kept in mind that containing and suppressing wildfires require a combination of options, from ground level first responders, equipment, fire-engines through to air-tankers.

- And that in this, the key to success is the reality that;- All new equipment development, methods and options require the input, knowledge and experience of the existing fire services.

For this reason emphasis is placed on existing fire services:-

6 Existing fire services;-

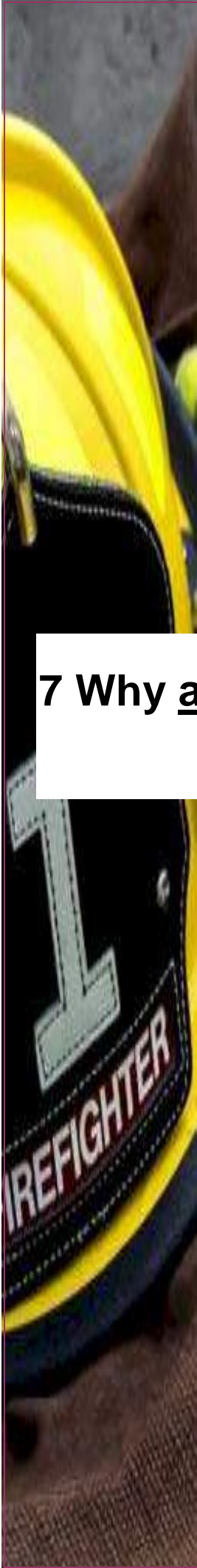
Head-on believes that any new innovations of equipment and methods have to form an integrated part of the existing fire services. As well as, draw on the support and experience of existing fire services.

The initiative is therefore designed:-

To draw on the experience of existing fire services, with the focus points

1. Fire-stations and
2. Community Wildfire prevention organizations on an individual chapter or council basis.
3. Secondly to assist Fire-stations to develop an innovation culture and the skill of existing fire services to maximize the impact of wildfire containment actions.



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- 4. In addition, to encourage participation, innovation, partnerships & collaboration with communities, business, government and industry associations, an objective that is included in the design.

For this purpose (to foster innovation) the initiative is structured on a **competition basis**.

The cornerstone is “adopted nominated Fire-stations”:-

With public, business & government participation that is linked to a nominated (specific) Fire-station.

7 Why adopt & sponsor a "Fire-station"?

As stated above, wildfire destruction and mudslides are out of control.

There is an urgent need for speeding up the development of new options and new equipment to combat and reduce the destructive impact of wildfires & mudslides.

The reality is that the wildfire impact can be reduced **by up to 80%** and more.

To achieve this the keywords are **“New methods”** +

“New equipment” =

(In short) **Innovations**

This needs to draw on the support and experience of existing fire services.

It is not just the responsibility of fire services but also the public.

- It is not just the responsibility of fire-services but also needs to include the broader participation of community action,
 - From land-use, town-planning and property fire prevention action.

Therefore by adopting & sponsoring a Fire-stations you help to bring together both:-

- **experience from existing fire services and**
- **new ideas & new thinking via broad community engagement.**

The Key:-

8 “First Responders Innovation Hubs”

- Where First Responders bring and input experience & the community brings ideas.
- Together experience + ideas are the foundation of real innovations and real solutions.

The First Responders Innovation Hubs:-

Objectives are to develop and act as focus groups and innovation centers (Hubs) for the:-

- Development of new methods + equipment for wildfire containment and suppression.
- Communities + Fire services + Business + Government

This includes industry associations, local government through to Federal government.

3) Via innovation focus groups with Fire-stations as the center.

Covering from land-use, town-planning, property protection, fire detection, re-action, containment & suppression, victims support, land rehabilitation and landslide prevention actions.

9 Funding deployment & reporting

The primary objective and goal of Head-on is to initiate innovative new methods and equipment to:-

- Manage, contain and suppress wildfires and the follow-on damage of mudslides.

Utilizing California 2017 as base year in scale, with the primary goal to reduce future wildfire impact to 80% of the 2017 California baseline.

Parallel with this, the goal is to develop an innovative culture among first responders and communities to maximize secure, safe communities, and safe & stable business environments with regards to wildfires and mudslides.

- All funding will go directly to and will be applied to achieve the primary objectives.
- Full public reporting form an integral part of the initiative.

10 The Firefly innovations

The Firefly Innovations is a trading division of the registered company Lateral Economic Activity Development CC or LEAD a South African company.

Founded by Johann H Ries and major shareholder. In addition the company works with a large base of associates from academic to technical organizations that we collaborate with.

The Firefly Innovations develops growth initiatives, within what we term, future directed frameworks.

For further details see:-

<http://www.thefireflyinnovations.com/home/about/>

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Your actions can help to achieve the overall objectives:-

To reduce wildfire destruction & the follow on mudslides by over 60 to 80%.

Empowered Firefighter



Protected Communities



Thriving Habitat



Living Forest



A new generation of communities and fire services
• That protect with innovation