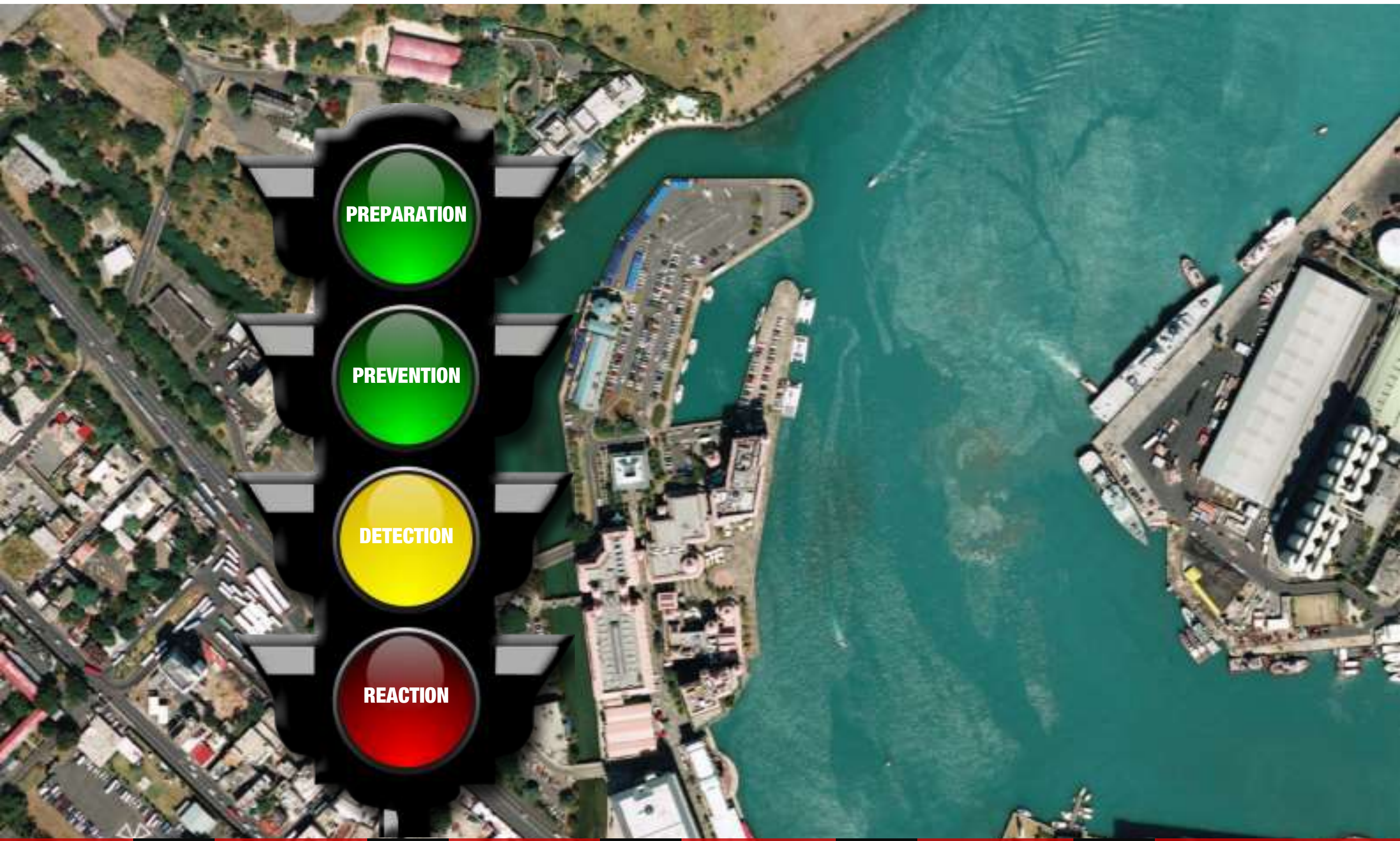
WE HELP OUR CUSTOMERS PREPARE FOR THE UNEXPECTED.

FLOODING RISK MANAGEMENT

Preparation, Prevention, Detection, Reaction Solutions.

Bramston & Associates


PREPARATION
PREVENTION
DETECTION
REACTION

"Urban flooding is a serious and growing development challenge. Against the backdrop of demographic growth, urbanization trends and climate changes, the causes of floods are shifting and their impacts are accelerating. This large and evolving challenge means that far more needs to be done by policy makers"

Abhas K. Jha, Dr. Robin Bloch & Jessica Lamond
Integrated Flood Risk Management for the 21st Century

A PRAGAMATIC APPROACH

Mauritius is experiencing flooding since several years. The number of reported flood events has been increasing significantly. Flooding caused widespread devastation, economic damages and loss of human lives. The government of Mauritius identified this as a high priority by establishing a Ministry of Environment, National Emergency Centre and Beach Authority.

Flood Risk Management decisional process and related policies are under close scrutiny and are currently under review by the Honorable Jayeshwur Raj Dayal, CSK, PDSM, QPM, Minister in charge. In order to contribute to this review, this document provides comprehensive, forward-looking operational solutions to introduce to Mauritius Emergency & Risk Management stakeholders some technical and tactical elements of answers to manage the risk of floods in Mauritius transforming urban environment and changeable climate.

The solutions proposed in this document would enable to empower appropriate identified measures and could be integrated to the existing process.

A JOURNEY IN FLOODING RISK MANAGEMENT

Flooding is a serious and growing development challenge. Against the backdrop of demographic growth, urbanisation trends and climate changes, the causes of floods are shifting and their impacts are accelerating. This large and evolving challenge means that far more needs to be done by Authorities to better understand and more effectively manage existing and future risks.

General Principles

The growing challenges of urban flooding are:
Flooding is a global phenomenon which causes widespread devastation, economic damages and loss of human lives.
The occurrence of floods is the most frequent among all natural disasters.

Twelve key principles for integrated urban flood risk management are widely agreed:

1. Every flood risk scenario is different: there is no flood management blueprint.
2. Designs for flood management must be able to cope with a changing and uncertain future.
3. Rapid urbanisation requires the integration of flood risk management into regular urban planning and governance.
4. An integrated strategy requires the use of both structural and non-structural measures and good metrics for “getting the balance right”.
5. Heavily engineered structural measures can transfer risk upstream and downstream.
6. It is impossible to entirely eliminate the risk from flooding.
7. Many flood management measures have multiple co-benefits over and above their flood management role.
8. It is important to consider the wider social and ecological consequences of flood management spending.
9. Clarity of responsibility for constructing and running flood risk programs is critical.
10. Implementing flood risk management measures requires multi-stakeholder cooperation.
11. Continuous communication to raise awareness and reinforce preparedness is necessary.
12. Plan to recover quickly after flooding and use the recovery to build capacity.

PREPARE FOR FLOODING

Implementing Initial Measures

GEOGRAPHICAL INFORMATION SYSTEM

With GIS, geographical information is stored in a database that can be queried and graphically displayed for analysis. By overlaying or intersecting different geographical layers, flood prone areas can be identified and targeted for mitigation or stricter floodplain management practices.

To identify the areas within our national plan that are at risk of flooding.

GIS Would Help You To Achieve The Following Tasks

1. To prepare and to put in place strategies for managing flood risk from ground water, surface water and ordinary watercourses on a day-to-day basis;

2. To ensure arrangements are in place for the co-ordination of flood risk management across sensible areas;

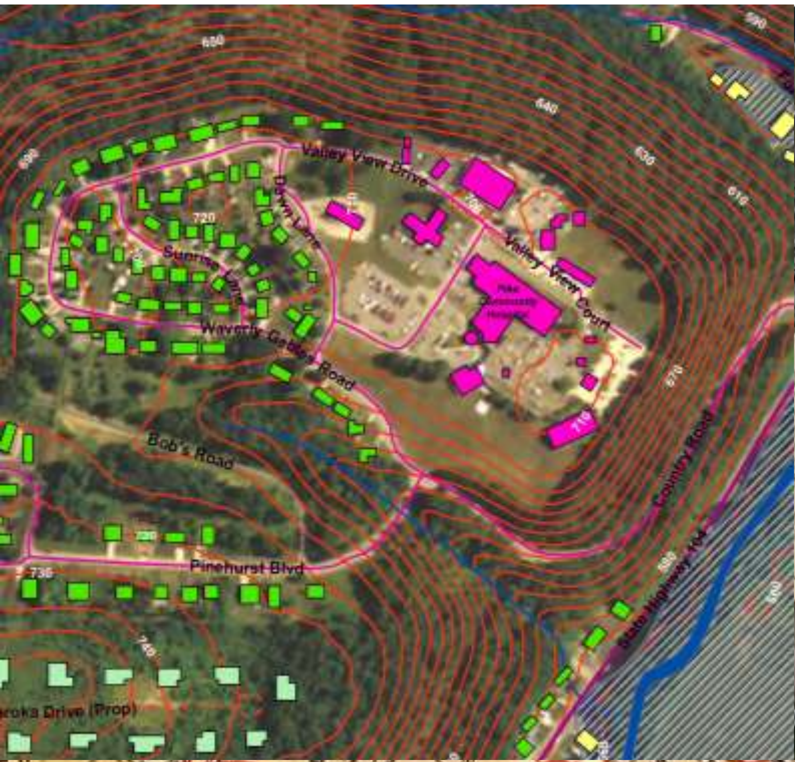
3. To maintain a register of flood risk management structures, investigate flooding incidents where there s uncertainty over responsibility.

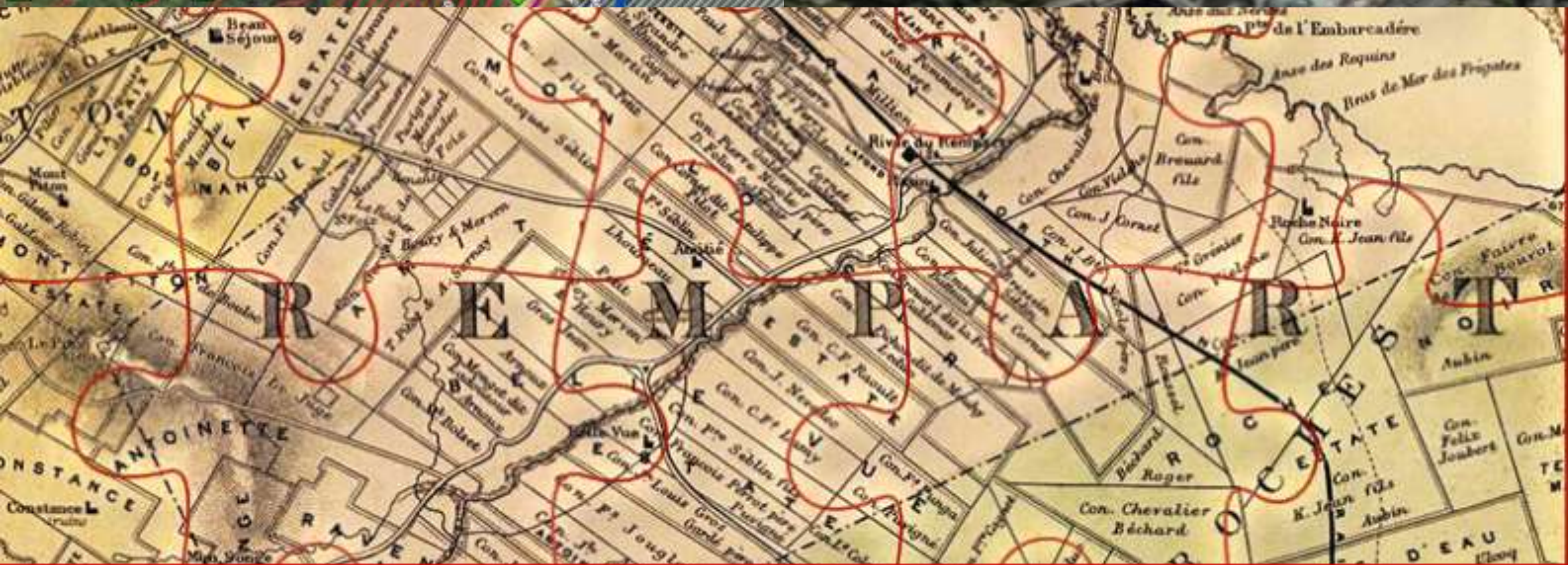
Using GIS to predict, plan, prepare and protect from flooding

GIS will help in the preparation. Appropriate information for the surface water (SW) management plan will be collated, analysed and mapped in the GIS platform.

GIS will enable data collation. Data and information which will be collated would be held in a central store. Data on assets and historical flooding should be mapped using GIS.

GIS will assist in understanding risk. Flood risk should also be mapped to highlights locations at risk of SW flooding for a range of flood probabilities. The location of critical infrastructure would also be mapped, to identify whether they are at risk of SW flooding.





"We're going to have to stop looking at these disasters as something to wait for, we've got to start looking at these disasters as something to prepare for, to anticipate, to start building new infrastructure; to start having new plans, to recalibrate the baseline that we're working off of." - Barack Obama, President of the USA.

It is in rolling out this strategy that geographic information systems (GIS), mapping and location analytics can play such a critical role.

OUR OFFERING

GIS Implementation

Our process for GIS implementation typically begins with an evaluation of your needs. We take this time to get to know you and to gain an understanding of how GIS can serve your organisation as well as learning about your potential data sources that can be utilised in your GIS. Next we take the time to conduct face-to-face interviews with your team to help us develop a strategy or roadmap for your GIS implementation, including technology hardware and software recommendations, staffing, training, and budget requirements. Our staff can meet your GIS needs before, during, and after your GIS implementation.

GIS User Training

Our team of GIS experts can set up the right kind of GIS user training to meet your needs and fill knowledge gaps. We have GIS geeks who can conduct training at any location, whether it be on-site or remote. We share our GIS knowledge with others so that they can not only perform basic GIS related tasks, but also leverage your investment in location technology in new and innovative ways.

Data Services

There are many challenges for organizations when it comes to managing spatial databases. Among those challenges include a lack of spatial database management expertise from IT personnel. Without proper maintenance, these geodatabases will begin to exhibit poor performance and inefficiencies. We provide the following services: Moving Away From Paper, Identifying The Right Content, Data Migration, Maximizing Your Data.

BENEFITS OF A GIS

GIS can be leveraged to assess effectiveness and quality of flooding plans. GIS would contribute to understand where the pinch points lie and to define a spatial workflow to determine where resources can be best allocated to have the maximum positive impact.

GIS would enable prior taking any action to measure, to analyse, to model, to plan to take relevant decisions.

The geographic knowledge would provide many benefits: understanding, efficiency, cost savings, improved decision making, better communication, better collaboration and better coordination.

PUBLIC AWARENESS

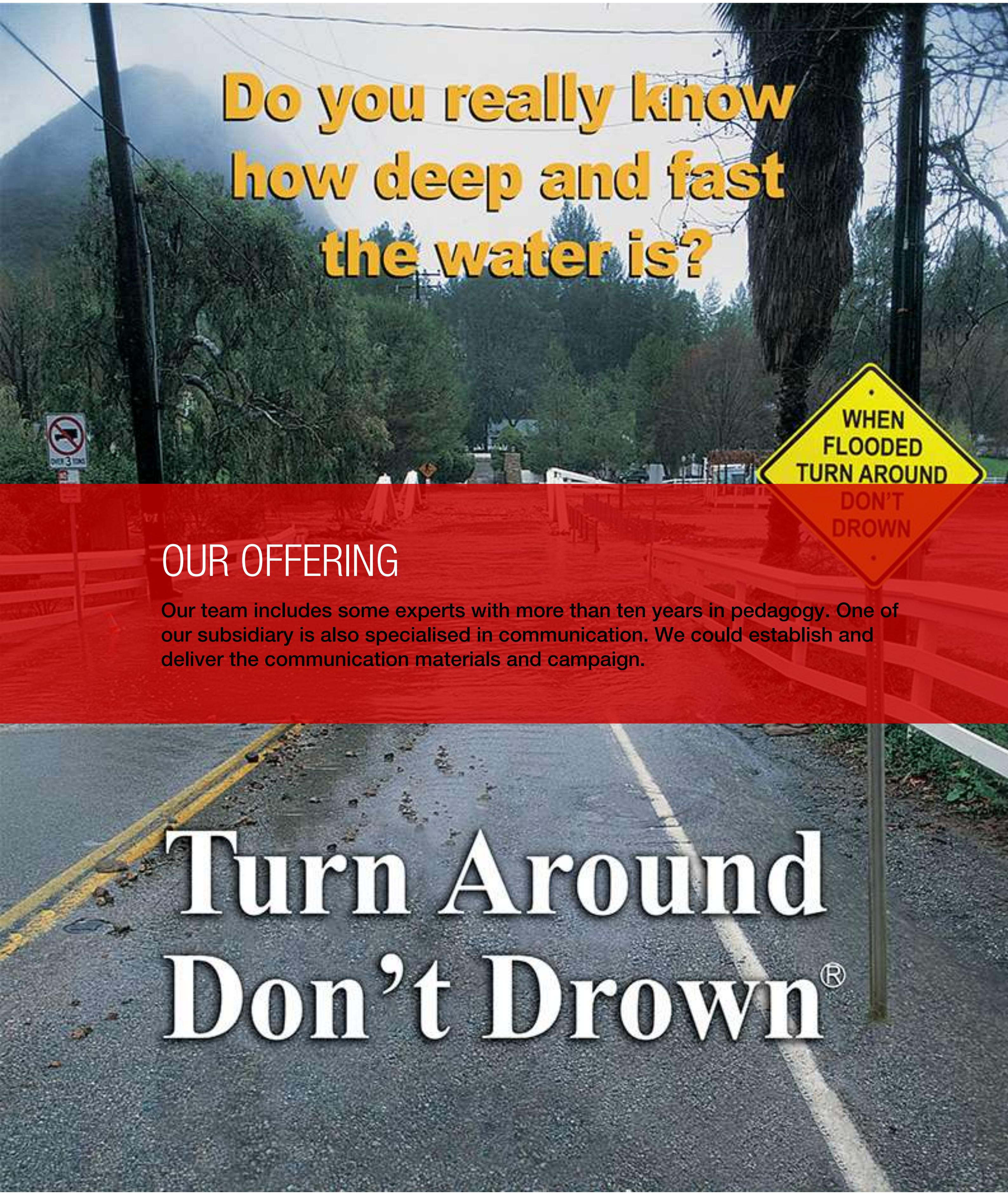
Improving public awareness for flood safety is crucial. The goal is to improve understanding about flood risk among individuals, families, businesses and communities. Knowledge and the right precautions can protect families, homes and finances. Surveys have demonstrated that public awareness does not ensure public preparedness. Specific educational materials should therefore be developed and communicated.

Communication to Adults

A better understanding of risk perception would improve communications, addressing three key concepts: (i) awareness of flood risk, (ii) worry about floods and (iii) and preparedness for flooding. The communication should provide specific information (i) on easy to implement flood mitigation measures, (ii) to give householders more confidence in protecting their property, and (iii) locally tailored information on safe evacuation routes.

Communication to Children

Children are a flooding risk extremely vulnerable group. Children are also effective risk communicators. An innovative flood safety awareness program focusing on school teachers and school children could be established. It would involve development of information, education and communication materials, improvement of school facilities through understanding flood risk potentially happening at schools, orientation sessions to teachers and students and flood awareness campaigns at schools.

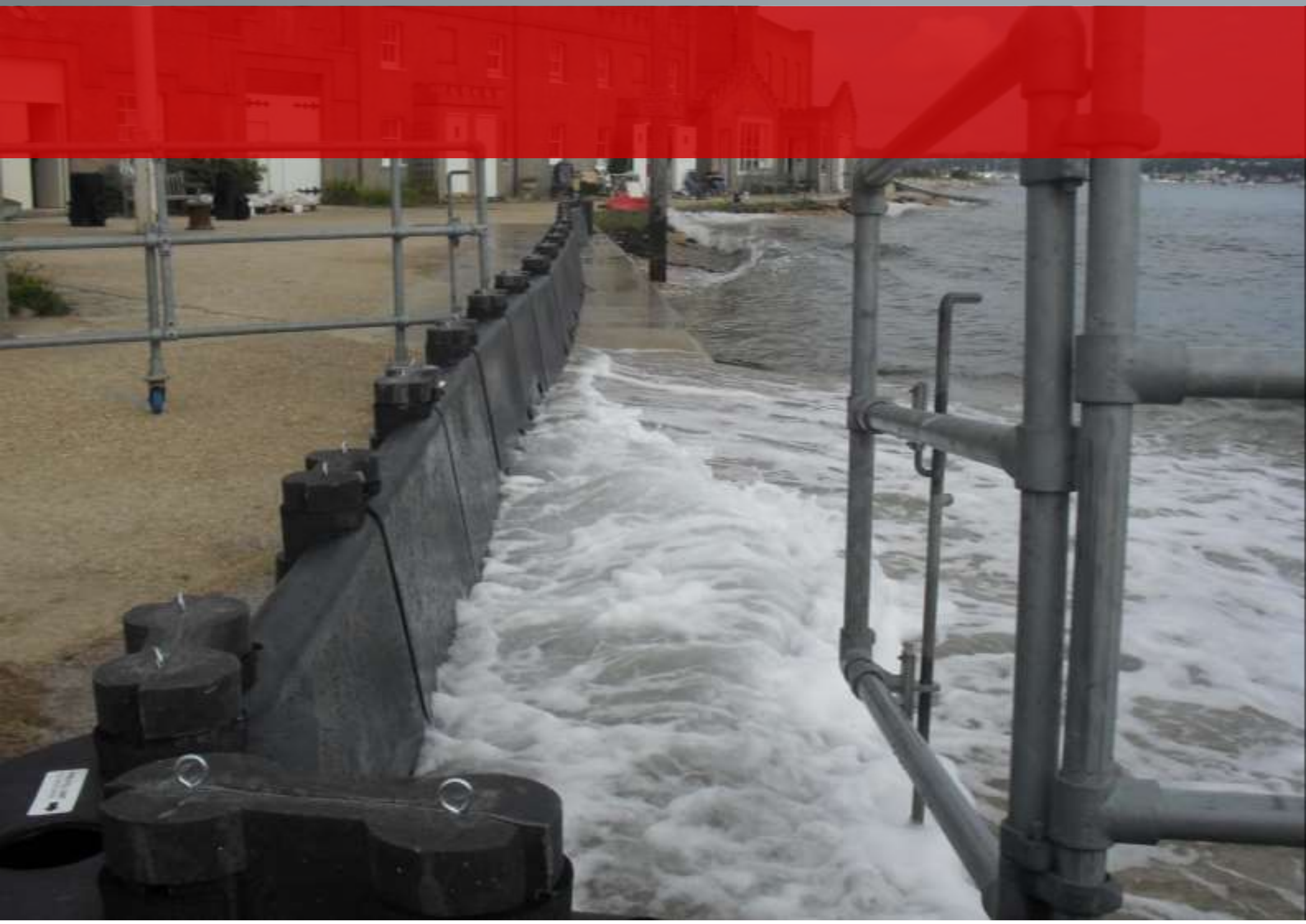


OUR OFFERING

Our team includes some experts with more than ten years in pedagogy. One of our subsidiary is also specialised in communication. We could establish and deliver the communication materials and campaign.

PREVENT FLOODING

We cannot stop the rains from falling or stop flowing surface water from bursting its banks. But we can do something to prevent them from having great impact.



INNOVATIVE FLOOD DEFENCE BARRIER

Floodstop is a unique, rapidly deployable flood barrier system. The barrier is assembled through a series of interlocking units. When assembled these units actually fill with the rising flood waters. This, combined with the weighted connection keys, ensure an assembled barrier will always be denser than the flood water.

Household, business and authority flood protection

1 **Key Benefits**

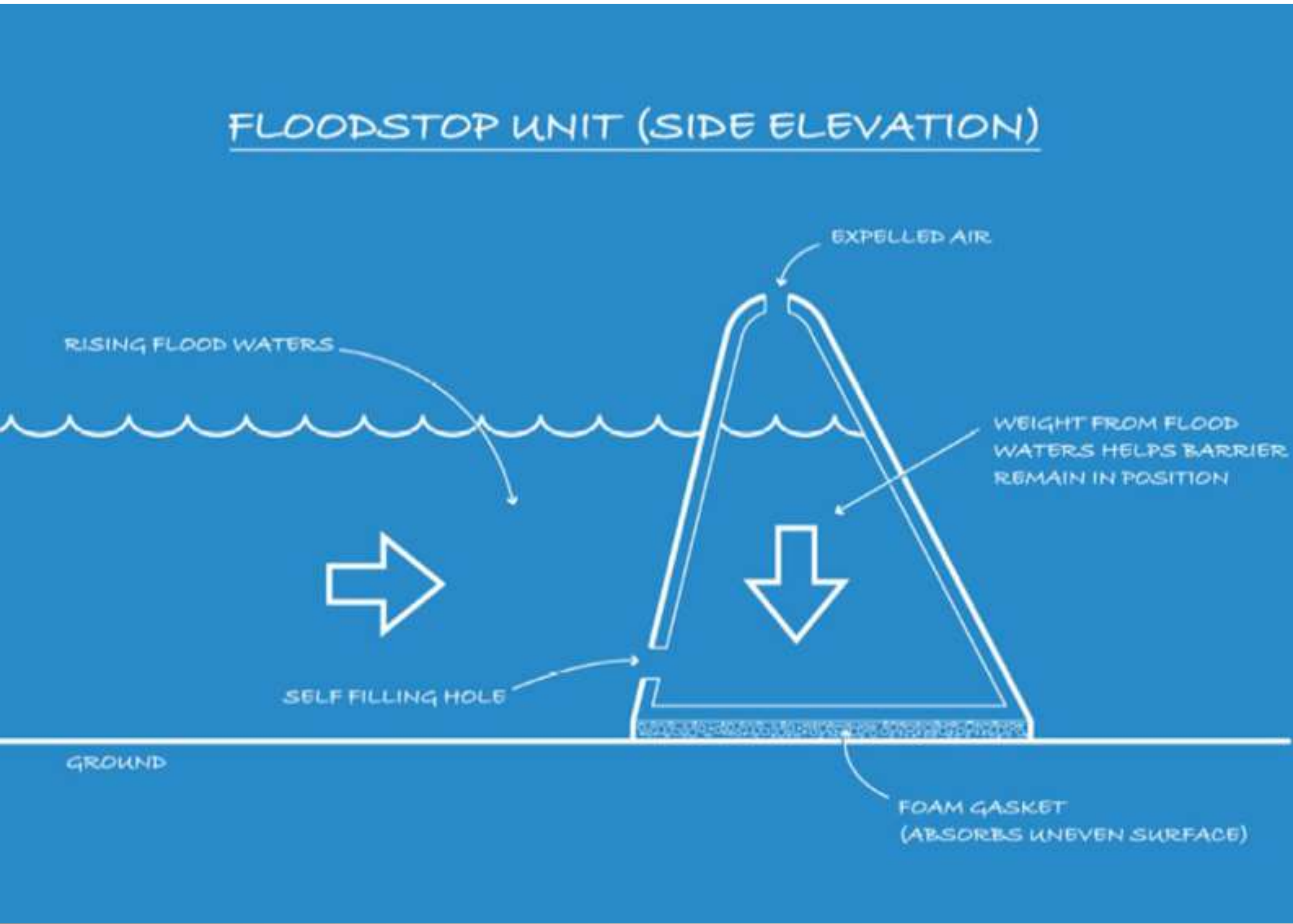
- More effective than sandbagging
- No construction works required
- Multi-functional
- Can be rapidly deployed
- High quality, field tested system
- Requires no specialist training
- Lightweight
- Low cost

2 **Applications**

- Flood protection
- Rapid response
- Semi-permanent
- Permanent flood protection
- Reservoir deployment
- Spill kit
- Sludge/slurry containment
- Fluid containment
- Road traffic delineation

3 **For use**

- Infrastructure
- Highways
- Commercial properties
- Industrial installations
- Domestic properties – community or stand alone



FLOOD BARRIERS & FLOOD PROTECTION FOR LOCAL AUTHORITIES

When flood warnings are issued, speed is the key. The responsibility to act often falls to authorities and their emergency planning department to try to ensure that there is adequate flood protection to keep their communities safe.

That's where FLOODSTOP - flood defence barrier can offer massive benefits over traditional sandbag methods. FLOODSTOP - flood protection can be easily and rapidly assembled, and because each of the 0.5m system's components complies with health and safety lifting regulations, they can be deployed by one person. The 0.9m system can be quickly deployed by a team of two people.

Unlike sandbags, FLOODSTOP flood protection barriers can be used time and again, meaning they are extremely economical.

Rapidly deployable with minimal staff, multi-functional within communities, the barrier also functions as a road traffic delineator barrier & reservoir system.

Real solution to the struggles that emergency planners face when dealing with flood prevention issues .









HOW DOES THE FLOOD PROTECTION BARRIER FLOODSTOP WORK?

FLOODSTOP units (pods) actually fill with the rising flood water. This, combined with the weighted connections keys, means that an assembled barrier will always be denser than the flood water.

Each flood prevention pod incorporates a unique foam gasket base. When the foam gasket is placed under pressure by the self-filling units a seal with the ground is created.

The beauty of this patented flood prevention system is that no bolting to the ground is required. It also means that when the flood waters recede, the pods empty themselves and become light enough to be carried away. They are also a much more cost effective and reliable alternative to flood sandbags.

STORM AND FLOOD PROTECTION

With the Beaver® Storm and Flood Protection System resistant and cost-efficient protective barriers can be quickly erected with few staff.

The elements of the flood barrier are initially inflated, easily moved into the desired position and subsequently filled with water from a nearby water source or a hydrant. The individual elements are joined together by a patented link system. This makes it possible to build flood barriers of any length which conform to all types of terrain.

Additional hold back capacity can be obtained by adding a further single hose on top of the twin element.

The Beaver® Protection System guarantees fast assembly of temporary protective barriers and their simple and flexible use. The rapid and easy disassembly and removal, together with good storability are additional assets of this reusable system.

The Beaver protection system is by far the most sold mobile location independent bad weather and flood protection system. The Beaver protective hose dam is the mobile dam solution, with the most extremely successful emergency usages (more than 300 as at June 2013). Emergencies in part under the most difficult conditions. The around 40,000 running metres sold protect our customers from catastrophes and reduce immense financial damage.

USE WATER TO CONTROL FLOODS

The elements of the flood barrier are initially inflated, easily moved into the desired position and subsequently filled with water from a nearby water source or a hydrant.

Rapid installation

In August 2005 in the bad weather and floods in Lucerne, 8 people set up a 320 metre long Beaver hose dam in 1.5 hours.

The ability to set up a protective dam quickly is vital in bad weather and floods. Adding a further hose on top increases the dam height quickly and easily. Important: The high water mark should not exceed the dam height of the Beaver double element. Placing a third hose on top is possible for emergencies only.

Multipurpose application

The Beaver® Protection System, with its various combinations, allows for a successful fight against potential flooding situations.

Protect the landscape: Villages, towns, agriculture, settlements

Hold back and divert water: During storms and floods on lakes, rivers and brooks as well as mud and water pipe rupture

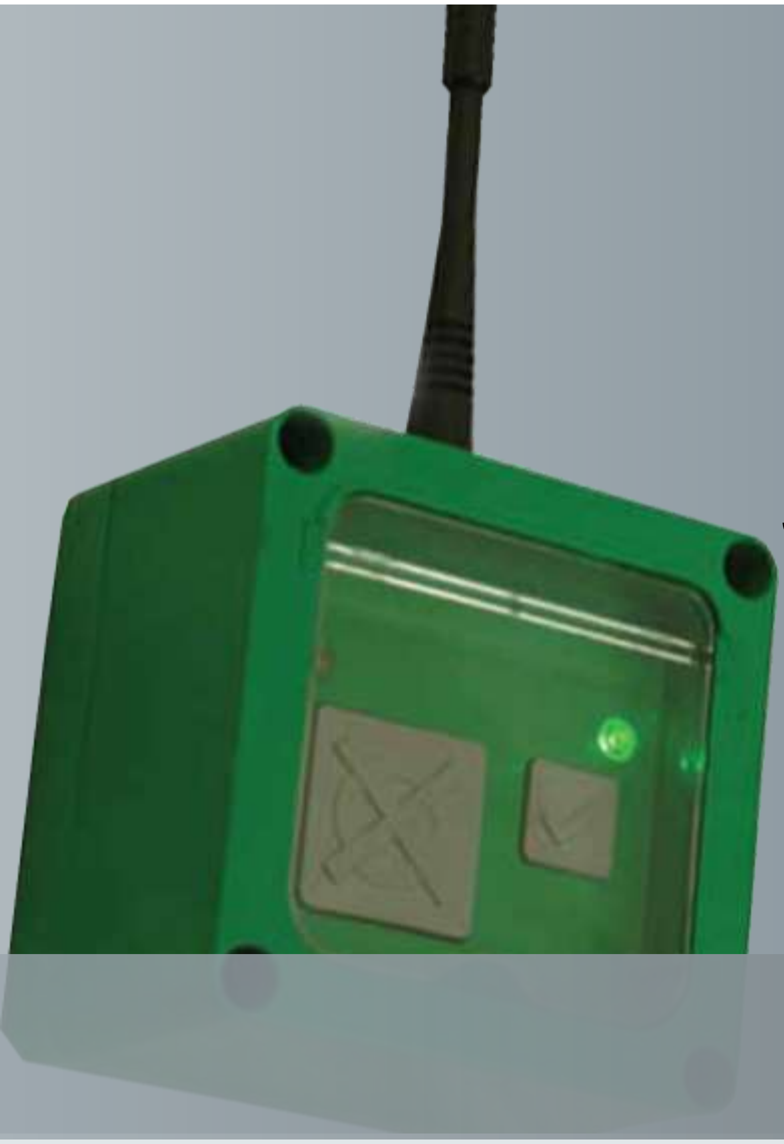
Cross water: As a footbridge during floods or even as a raft with an outboard motor.

«Two months after we purchased BEAVER elements, the mobile flood barriers protected us against the rising waters of the Emme river. Thank God the water didn’t enter as it did years before. Damage: 0 Swiss Franc. WE ARE VERY SATISFIED WITH BEAVER FLOOD BARRIERS!»

Fire Brigade Biberist/Switzerland

EARLY DETECT

Monitoring Floods Using Near-Real Time Detectors



FLOOD EARLY WARNING SYSTEM

Monitoring flooding and inform authorities in advance.

3 Things You Should Know

1. Flooding could be monitored from remote area through wireless devices.

2. Authorities could be automatically informed of a flood detection (including sites) by SMS few minutes in advance.

3. Alarms could be initiated by authorities on a remote basis to inform citizens of the risk.

Flood sensors can be placed in different sites, sending alarm when they come into contact with just 1/16” of an inch of water.

Flooding can occur form many sources including groundwater, storm water run-off, blocked drains and sewers (sewer flooding) and river rise etc. Often it is not possible to prevent flooding, however in areas that are prone to flooding, a few additional tens of minutes warning can make all the difference when it comes to mitigating the effects. Flood gates, air-brick seal , all take time to fit/close therefore there is little point in having a flood alarm on your front door step - it needs to be remote to give you time.

Alerts are sent across multi-channels.

Authorities get updates immediately.
Information is sent to authorities through SMS, E-mail and voice.

HOW DOES THE SYSTEM WORK

Unlike traditional domestic flood alarm products which produce a local audible sound when the floodwaters are lapping at the doorstep, this all British system is designed to raise an advanced warning to an entire community of up to 1000 persons by means of telephone, internet and the cellular network, hence giving everyone the maximum amount of warning whether home or away to take action. The system is fully inclusive -by this we mean that the system that delivers warning messages equally to both the visually or hearing impaired members of the community.

The system is based upon technology that is used daily to protect important infrastructure such as the railways and electricity grid from the effects of flooding. At the heart of the system is one of our robust industrial food sensors with integrated e-mail communicator housed in a tough GRP enclosure. The whole system is normally installed at the edge of the community in a safe but in a low lying area where the rise of flood waters can be detected early.

A key part of the deployment of the system is the creation of a contact a list containing the details of these wishing to receive warning messages and by which preferred means. Those wishing to participate will be asked to subscribe by submitting their name and up to two contact numbers, one of which can be a mobile for SMS text purposes, plus and e-mail addresses for both warning messages and information updates. They will also be asked to tick a box if either they are visually or hearing impaired just to ensure that the mode of broadcast selected is appropriate for them,

Upon the rising of the floodwaters - water enters the base of the flood alarm through strategically placed inlet holes. Once the level within the flood alarm chamber exceeds a preset level the alarm is activated and starts to sends its messages to the remote data server. More than one message is sent ensuring the maximum chance of the messages getting through to the server.

The server is kept in a secure 3rd party data centre away from the risk of fire, flood or disaster. When the server receives an e-mail from the flood alarm the message is validated and the location of the flood alarm identified.

Using the relational database stored in the server, which has been created from the contact list, the server pushes out e-mails, SMS texts and calls the number on the list, taking into consideration any disabilities noted.

It goes without saying that ultimately the success of the system will depend upon the full cooperation of the community and we always recommend that subscribers upon receipt of a warning message still contact their neighbours on the off chance that they have left their telephone switched off, the battery has run down, have left their phone off the hook, have failed to check their e-mails or texts etc. Further, there will be periodic tests broadcast throughout the year and we don't want these to be mistaken for the real thing.

Finally, depending upon the flow of the river / steam through the village it may be necessary to deploy more than one flood alarm to offer a more compressive level of protection.

Flood Warning System Options Include:

- Local Siren
- Klaxon
- Flashing BeaconSMS Text - 1 to 1,000 people
- E-mail - 1 to 1,000 people
- Voice Messages for Visually Impaired
- Battery Powered

PUBLIC AUTOMATED INFORMATION

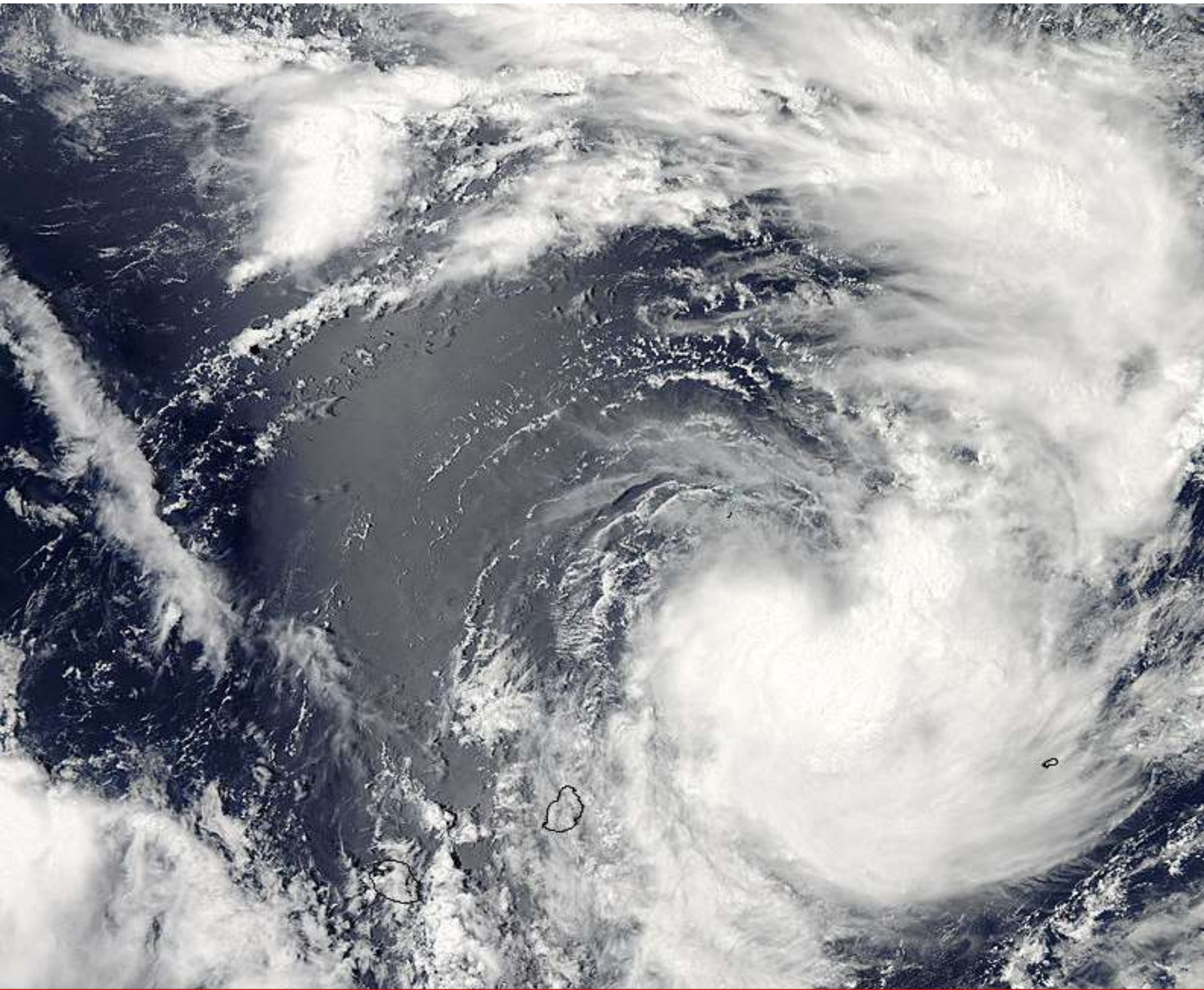
Creating Extra Potential

These are alerts issued because of an imminent threat to public safety or life, such as evacuation orders or shelter in place orders due to severe weather, a terrorist threat or chemical spill.

The way it works would be that a pre-authorized government authority sends an emergency alert to relevant agency/officer in charge, which then sends the alert to the participating cell phone companies, each of which then sends the alert to WEA capable phones in the zone of emergency. WEA capable devices are designed to reject duplicate alerts, so cell phone user should receive each alert only once. However, subsequent alerts may be issued that contain information similar to a prior alert.

Creating Extra Potential

The system may be used for other alerts such as AMBER Alerts. The AMBER Alert system, a method by which police officers may quickly publicise information when a child age 17 or younger is abducted such as the name and description of the child, a description of the suspected abductor, a description and license plate of the abductor's vehicle, etc.



WIRELESS EMERGENCY ALERTS

Wireless Emergency Alerts (WEA) on mobile phone is an easy way to inform citizens of a flooding risk detection. Cell phone companies (on a voluntary basis) may inform their customers of a risk, without imposing an additional charge for such alerts. Alerts would be sent to cell towers providing wireless service to a target geographical area, and then all WEA-capable phones using those cell towers would receive the alert. Thus, cell phone users will receive an alert if they are in a targeted area even if they are just visiting that area.

STEP 1

ALERT ORIGINATION

The Authority creates and sends an alert to the agency alert aggregator.

Alerts can be

Emergency Center

Amber Alerts

Imminent Threats

STEP 2

NATIONAL ALERT AGGREGATION

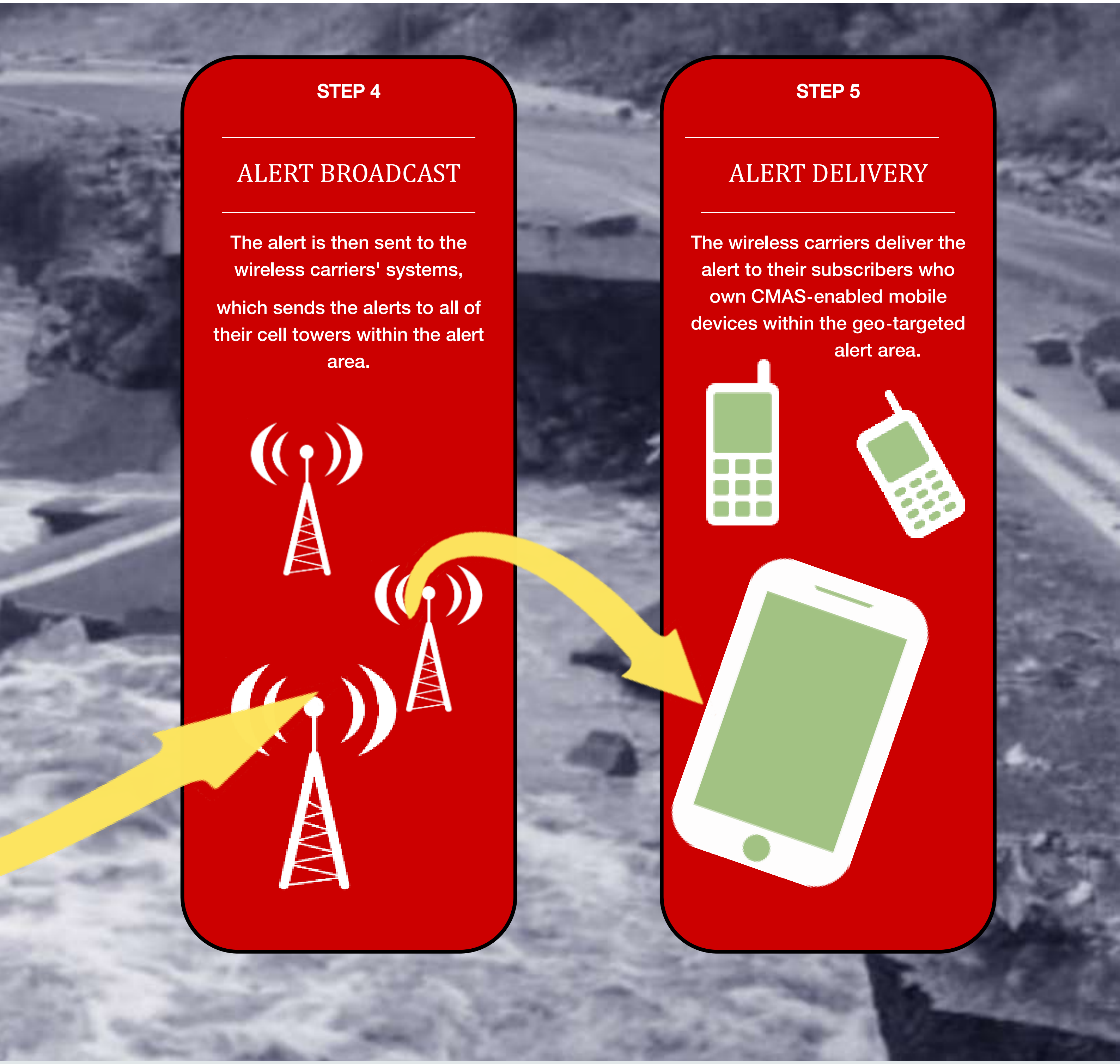
The national alert aggregator receives the alert

STEP 3

ALERT TRANSLATION

The national alert aggregator translates the alert into a standardised format for carriers to broadcast the alert to any

CMAS enable mobile device.



COMMERCIAL MOBILE ALERT SERVICE

A national service delivering relevant, timely, and geo-targeted alert messages to mobile devices.

REACT TO FLOODING

Fast Reacting To Save Lives

MOBILE
HIGH VOLUME
FLOOD PUMPS

HYTRANS SOLUTION

At large scale floods the main issue is always Water volume, Access to the flood water, Time, Distance and Labour availability.

When a flood occurs, there is always the need to pump away the water. Large areas such as tunnels, cellars, lower floors of buildings, underground carparks, open cut quarries and mines may need to be de-watered. At such times a simple to deploy and mobile flood pump is required. For fast deployment in combination with a high volume pumping system, preferably the flood pump will have a hydraulic pump for easy access to the flood water. HYTRANS is the world leader in mobile hydraulic large capacity flood pumps.

Hytrans Pump Solutions are widely used across Europe.

50, 000 litres per minute

The most efficient flood pump system

THE SOLUTION

The combination of a submersible pump to a diesel engine power pack enables to evacuate up to 50 m^3/minute.

HydroSub 150

Hydraulically driven submersible pump with large capacity.

HYTRANS Flood Module

Diesel engine power pack powers the hydraulic submersible pumps.

Evacuation

50,000 litres per minute

Large diameter flexible hose, of 150mm up to 300mm

HFS wasused during flooding in

- The Netherlands
- Belgium
- Germany
- Mexico
- Czech Republic
- Thailand
- France
- Portugal
- Switzerland

Submersible Pump

The submersible pump pushes (no suction, no priming) the water into large diameter hose. The submersible pump is an innovative hydraulically driven portable submersible pump that allows quick access to any open water source. The pump lift (vertical metres between the Submersible Pump and the Power Pack) can be up to 60 metres / 195 feet.

HydroSub Power Pack

Capacities of the Power 1,500 L/min to 45,000 L/min.

The containerised diesel-driven Power Pack Packs powers the hydraulic pump and the other parts of the system. Larger units feature a built-in booster pump and (optionally) a foam proportioner. The HydroSubs feature an easy to use control panel, while at the same time the advanced IQAN software will monitor all essential parts including pressure and flow. The control system will warn the user by signal or send out SMS's to multiple designated persons of any pumping issues. With an optional modem the Hytrans unit can also remotely communicate with the Hytrans technical division for services such as program updates and run data download.

Large Diameter Hose / Flood Hose

Large diameter hoses vary from 150 mm / 6″ up to up to 300 mm / 12″ and minimise friction losses. This allows large amounts of water to be delivered efficiently over long distances. These hoses typically use Storz or Multilug couplings.. Every user of a HYTRANS system can build a HYTRANS configuration to fit the specific challenges the user is faced with.

The key user variables often are (1) Access to water, (2) Amount of water, (3) Required pressure, (4) Distance from water source to the required water delivery location and (5) HYTRANS also uses easy to deploy flood hose for high capacity / low pressure water flows.

Hose Laying and Hose Recovery

Hytrans offer a mechanised hose laying and hose recovery system for large diameter hose up to 300 mm / 12″. The result is that emergency crews can now deploy much larger sized hoses over longer distances with very limited manpower and with minimum pressure loss.

A truck equipped with a Hose Layer Container and a Hose Recovery Unit provides an excellent and work safe hose laying and retrieving operation. 1,000 metres of large 6 inch diameter hose is recovered and ready for deployment in only 30 minutes.

Flooding Villahermosa
Mexico, 2007

Flooding Ulley Dam South Yorkshire
United Kingdom, 2007

Flooding Knokke
Belgium, 2007

Flooding Prague
Czech Republic, 2002

Flooding Zug
Switzerland, 2007

Flooding France
France, 2011

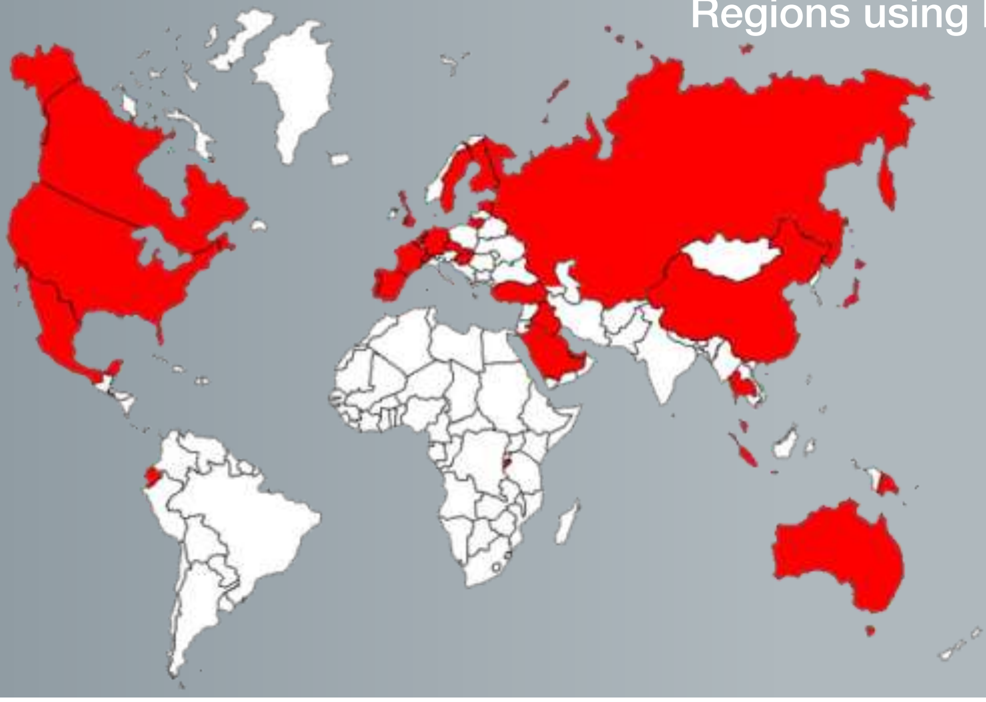
Flooding Limburg
The Netherlands, 1999

Flooding Mannheim
Germany, 2004

Flooding Madeira
Portugal, 2010

Flooding Doncaster
United Kingdom, 2007

Regions using HFS Pumps



MONITORING & COMMUNICATION

STEADY-CAM SYSTEM

Helikites are unique in having a proprietary, universal 'Steady-Cam' Camera Attachment system. This allows almost any type of camera to be easily attached and then held steady and level whilst providing a full 360 degree field of view. The 'Steady-Cam' systems also ensures that Helikite cameras are automatically lifted out of the way when the Helikites are close to the ground, so they are not damaged during landing or take off.

360 DEGREE TOTAL SURVEILLANCE

Another feature of Helikites is their ability to keep the same angle of attitude in the sky whatever the wind speed. This is very useful for all-round surveillance as it allows numerous cameras to be attached all around the Helikite to provide 360 degree surveillance. So even without the addition of camera levelling systems there is constant and reliable viewing of everything below the Helikite. A high zoom camera pointing in on direction is exceedingly useful, but it will miss what it is not pointing at. Getting constant video or photographic information from all around means nothing is missed. This is very useful for wide area policing of incidents such as riots, football matches crowds, festivals, traffic control or military training.

ECONOMICAL, TOUGH, NON-GYRO CAMERAS

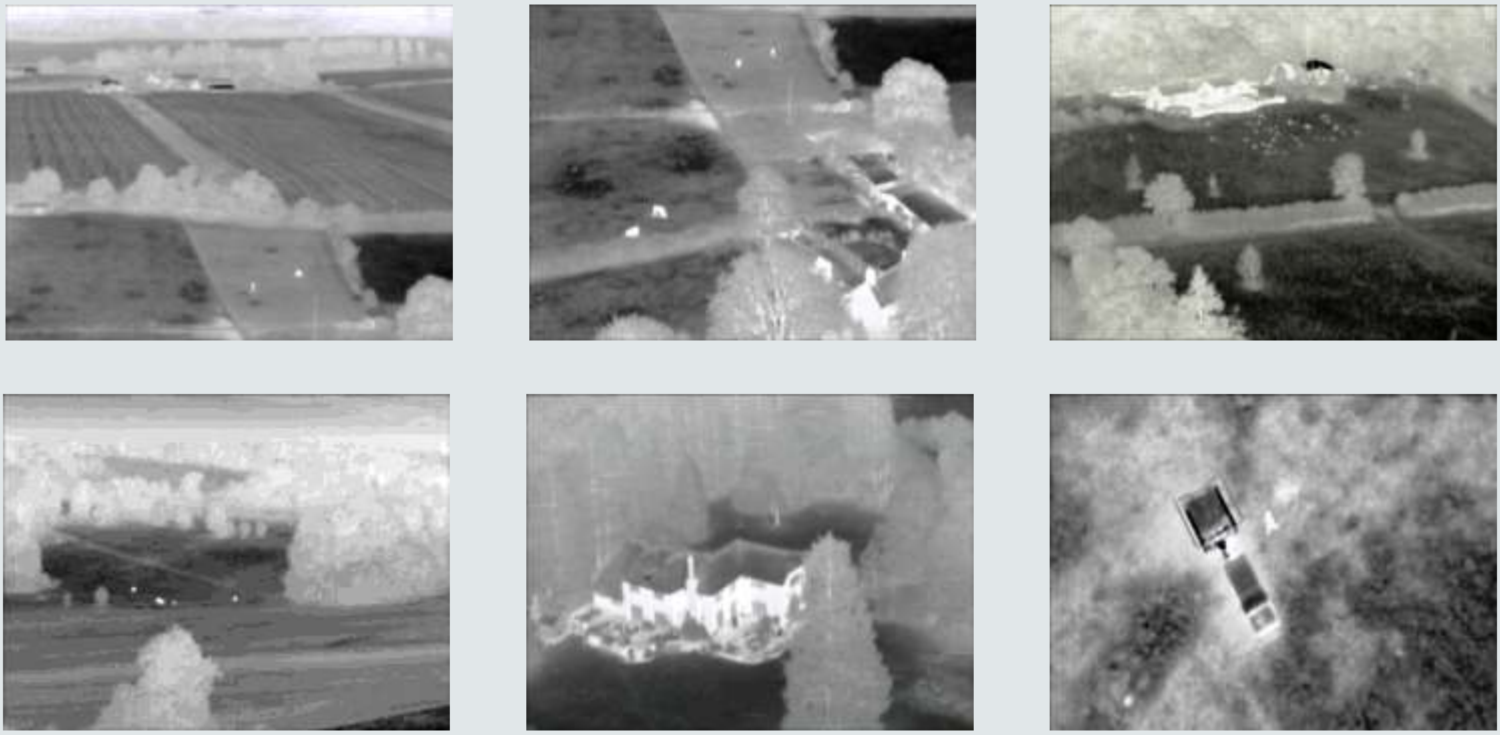
Helikites are so stable that non-gyro cameras such as 'Blackeyes' are capable of giving useful airborne surveillance at minimal cost out to about 1.5Km. Cost is not something that the US and UK military has taken seriously, so normal military aerostat surveillance systems are hugely over-sized, over-manned and over-priced for civilian industry use. Helikite surveillance systems have always been made with the civilian market in mind and so are far cheaper to buy and run long-term. Despite this Helikites are often far more capable and weather survivable compared to large standard aerostat systems costing many times more. Persistent Helikite airborne surveillance is very practical and economical in the real world.

TACTICAL AEROSTAT

During flooding management, the authority needs a complete overview of the situation. Mauritius Police Force helicopters could assist the authority during the day. This is becoming much more complex during the night. Bramston & Associates propose a tactical aerostat enabling multi-tasks such as wireless camera, infra-red camera and communication relay.
The solution is easily and quickly deployable on any site within few minutes.

GYRO CAMERA SCREENSHOTS - THERMAL CAMERA

GYRO CAMERA SCREENSHOTS - DAYLIGHT CAMERA



BLACKEYES SCREENSHOTS - THERMAL CAMERA

LONG-RANGE GYRO-CAMERAS

For very long range or higher resolution video, gyro-cameras are required. There are now excellent models available from the UAV and helicopter industry. Most UAV gyro-cameras can be lifted with Helikites, but we concentrate on those that offer the best performance for the least weight and power whilst remaining within a reasonable budget. These cameras are regularly updated and all new cameras are of interest to Allsopp Helikites.

MANUFACTURERS WORLDWIDE SUPPORT

The ability of the camera manufacturers to provide timely production, good warranty and worldwide maintenance of their products is very important. This is taken into account by Allsopp Helikites when recommending cameras for use on Helikites.

AIRBORNE LONG-DISTANCE PATROLLING

The ability of Helikites to be operated from mobile trailers as well as straight from the ground is very important for rapid deployment. Unlike other aerostats (that rapidly become unstable) Helikites can be towed at high speed behind trailers, trucks or boats with no problems at all. This allows long-distance patrolling and fast pursuit of felons in areas without overhead telephone or power cables. Patrolling in this way reduces the surveillance costs per square Km by ten times compared to fixed installations.

LARGER SURVEILLANCE SYSTEMS

The surveillance systems shown below are all in service and operating. However, there are larger cameras that could be lifted if required, such as the FLIR GD 380, or the Wescam MX15. These could be carried by a 200m3 Desert Star Helikite. Larger camera systems cost more per unit, but, if vast areas need to be protected larger systems often cost less per square kilometre of surveillance coverage.

ABOUT BRAMSTON & ASSOCIATES

RISK MANAGEMENT CONSULTANCY SERVICES

And the day came when the risk to remain tight in a bud was more painful than the risk it took to blossom.

The first indicator that you may need a risk management consultant is if you have to do something and don't know where to start.

WE HAVE DONE THIS FOR 12 YEARS

Bramston & Associates is a full service firm specialising in risk management across Africa. We deliver sophisticated services to an international Customer base. Our consultants have a wealth of experience in risk management. We advise on the establishment and on-going operation of African theatre's organisations, and regularly issue Customer updates on relevant issues. Our dedicated team can also draw upon the expertise of experts from our environmental, safety, technology, physical risk, regulatory and compliance practices whenever required to ensure a comprehensive service.

OUR SERVICES

Our customers face risk every day. From the hazardous processes used in their businesses to the extreme locations in which they operate, risk is an inherent part of their business. While we cannot eliminate these risks, we can establish risk management systems to protect and add value to the organisation.

Risk Management Services

Risk Management Services (RMS) is our main service and support unit. RMS coordinates our Customers' overall risk management effort through programs of compliance, security, technology, protective services and crisis management.

Technology Risk

Technology risks threaten assets and processes vital to your business and may prevent compliance with regulations, impact profitability, and damage your company's reputation in the marketplace.

Enterprise Risk Management

Taking a proactive stance leads to more effective strategies to minimise the downside while maximising the upside of risk.

Environmental Risks

Evaluate and analyze environmental risks.
Mitigating risks with adequate solutions.

HELPING OUR CUSTOMERS PREPARE FOR THE UNEXPECTED.

"To rely on rustics and not prepare is the greatest of crimes; to be prepared beforehand for any contingency is the greatest of virtues."
Sun Tzu

Our functional expertise, whether in safety, organisation and change or information technology, provides us with the knowledge to solve our customers' problems while building their capabilities.

WE MAKE IT HAPPEN.

We provide a disciplined means to identify, quantify and manage a range of risks, including operational, man-made and natural. We establish a framework that supports informed decision-making, planning and allocation of resources to protect and enhance the organisation's assets, image and objectives through improved operational efficiency.

We work at all levels of an organisation, from board to operations, addressing strategic to technical risk, ensuring maximum value is obtained by efficiently engaging with your management team to fully understand the material uncertainties at all levels of the business, to focus on priority issues, to develop cost effective ways of controlling them, and to make change for business improvement.

MEET OUR TEAM

We combine the flexibility of highly trained professionals with the strength of a seasoned consulting firm. Whether you need a complete risk review or want advice on a particular risk, you should not hesitate to talk to our consultant.

HOW
WE DO IT

Our expertise and approach to strategic, compliance, operational, project and extreme risk management has developed over our engagements in a wide range of businesses. You can be assured of relevant, practical and insightful outcomes which are directed to ensuring your business objectives are achieved.

WORKING ONLY WITH LEADING PARTNERS

Bramston & Associates utilizes its global network of resources to provide comprehensive security risk management and consulting for our Customers in Africa.

ETHOS

We are constantly committed to constructing a strong corporate culture and sharing its prosperity with all of our employees.

EQUALITY, FACTUALITY, PASSION AND INNOVATION

We have always been pursuing the core value of equality, advocating a corporate culture everyone is equal, and maintaining a fair, just and open corporate culture atmosphere.

TECHNOLOGY-BASED AND INNOVATION-ORIENTED

Since our inception, we are creating core competitiveness of "quality, cost and efficiency" relying on strong R&D and innovation capabilities.

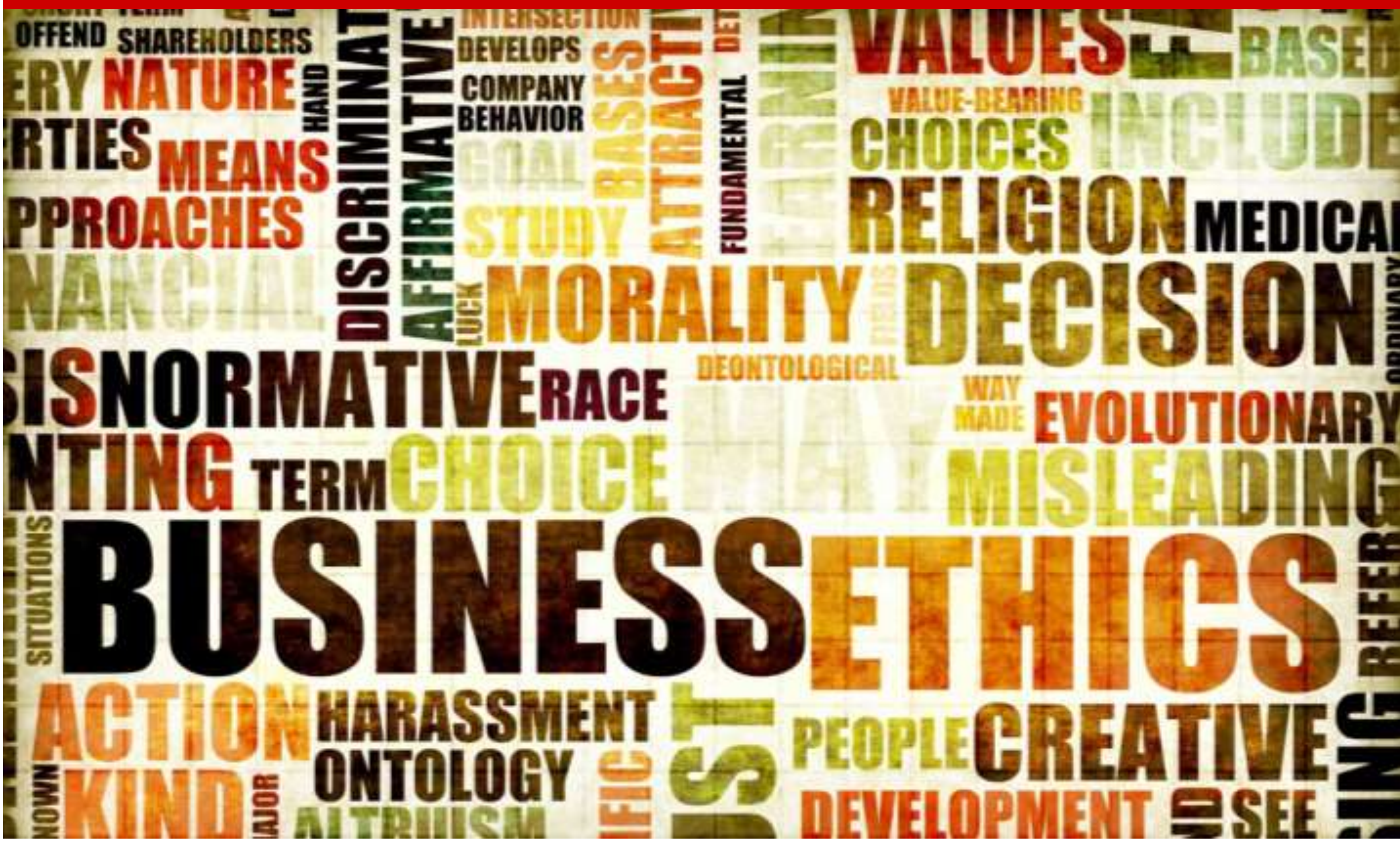
QUALITY CULTURE

We seek to develop our culture of quality and excellence through a long term development initiative.

CODE OF ETHICS

Adherence to our Code is an assurance to Customers that members of Bramston and Associates maintain the highest standards of professionalism in their conduct with Customers and stakeholders, and their colleagues.

All members firms of Bramston and Associates shall represent Bramston and Associates and the profession of consulting with integrity and professionalism.



Ethics are important for us because of the high level of trust that organisations grant us.

ADVICE YOU CAN RELY ON

Prior to our engagement, we take account your situation, budget, timeline, and the requested deliverables.

We focus on strategic and business objective setting, then develop corporate, operational, project, sustainability and resilience risk profiles and capability, maintaining a balanced approach. In doing so, we are sensitive to our client's culture, while addressing quality not quantity and long term benefits instead of short term fixes. We ensure that management and the Board understand the real risk profile. Most importantly, we advise on control planning, accountability and action, so there are no unwanted surprises. Over many years and experiences, we have developed and refined our approach to risk management based upon what we have found works for our clients.

WHAT MAKES IT A DIFFERENT EXPERIENCE?

1 Your immediate access to expert, impartial and reliable professionals.

We offer a range of comprehensive consulting services to organisations for their operations.

2 Flexible and professional terms of engagement.

Customers use our services for a combination of project -based support and/or ongoing retained support.

3 Our proven expertise and capabilities

Our list of successful client assignments includes all size organisation from market leaders to medium and small.

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Bramston & Associates

We help our customers prepare for the unexpected.