Health and Safety in the Control of Invasive Species

Name: Colin Liptrot
Job title: Field Team Leader
Date: 22 November 2018

Environment Agency

Introduction

- Why do we need to do this?
- Risk vs Hazard
- Quantifying Risk
- Managing Risk

Environment Agency

Why do we need to do this?

- Control of Pesticides Regulations 1986 (as amended) (COPR)
- Food and Environment Protection Act 1985 (FEPA)
- Plant Protection Products Regulations 2005 (PPPR) and Plant protection products (Basic Conditions) Regulations 1997
- Health and Safety at Work etc, Act 1974 (HSWA)
- Control of Substances Hazardous to health Regulations 2002 (COSHH)
- Management of Health and Safety at Work regulations 1999
- Personal Protective Equipment at Work Regulations 1992
- Wildlife and Countryside Act 1981 (as amended)
- Groundwater regulations 1998
- Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004
- Chemicals (Hazard Information and Packaging for Supply) regulations 2002 (CHIP)

Environment Agency

Risk vs Hazard

- What is the difference?

Environment Agency

Risk vs Hazard

- What is the difference?
- A hazard is something that has the potential to cause harm. A hazard can be virtually anything in a certain situation

Environment Agency

Risk vs Hazard

- What is the difference?
- A hazard is something that has the potential to cause harm. A hazard can be virtually anything in a certain situation
- A risk is the likelihood that the hazard will cause harm to a person, an object, the environment etc.
- This can be quantified

Environment Agency

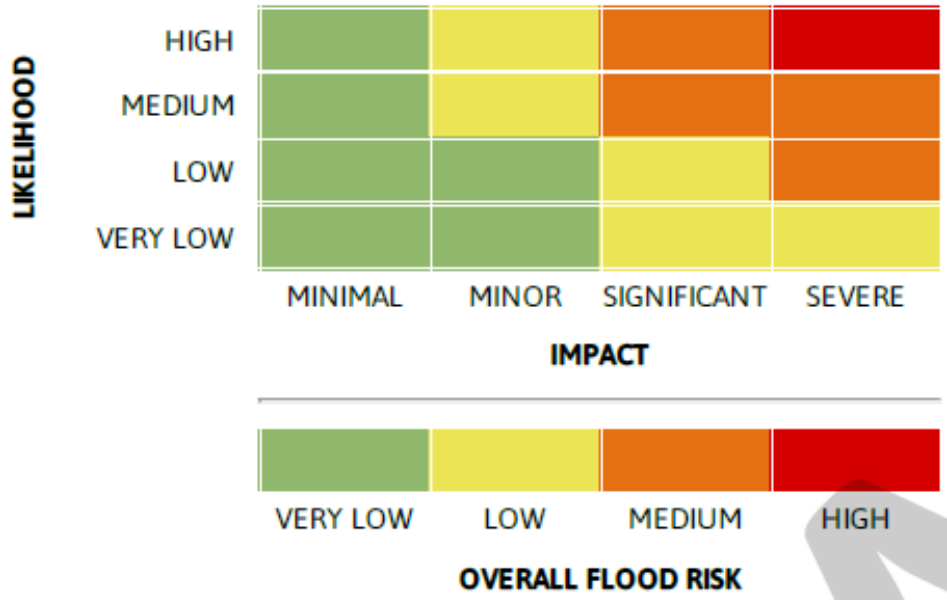
Quantifying a risk

- We need to know what the hazard is and who or what it is a risk to
- We need to know what the consequences are if this harm is realised
- We then need to know how likely it is to cause harm.
- We can then start to look at how we can reduce the risk.
- We can gather information

Environment Agency

Quantifying a risk

Flood risk matrix



Summary of potential impacts

MINIMAL
Isolated and minor flooding of low-lying land and roads
Isolated spray/wave on coastal promenades
Little or no disruption to travel, but wet road surfaces

MINOR
Localised flooding of land and roads
Flooding affecting individual properties
Disruption to travel and key sites in flood plans

SIGNIFICANT
Flooding affecting parts of communities
Possible danger to life and damage to buildings/structures
Disruption to travel and key sites in flood plans

SEVERE
Danger to life, severe disruption to travel
Widespread flooding affecting whole communities
Widespread disruption or loss of infrastructure
Large scale evacuation of properties possible

Environment Agency

Quantifying a risk

Further details

Following Storm Callum, heavy rain will continue to affect southwest England, parts of Wales and northwest England along with southern Scotland for much of Saturday. Areas of high ground exposed to the south and south west will be most affected, with the potential for a further 50-80 mm quite widely over hills. Further strong winds may bring down leaves and branches, increasing the likelihood of flooding due to blocked drains or culverts.

✓ Low likelihood of medium impacts

Environment Agency

Quantifying risks

- Once we have more information we can look at how we can reduce or control the risks.
- Some risks will be minimal, we need to address those most likely to cause harm first.
- We can do this in a number of ways and there is a risk reduction hierarchy

Environment Agency

Managing Risks

- **E**liminate the risk. Stop doing it or do it a different way.
- **R**educe the risk. Use a different method/process or do it less.
- **I**solate. Have barriers between the hazard and the person.
- **C**ontrol. Control access to the hazard, Safe systems of work, machine guards etc.
- **P**PE provide adequate personal protective equipment to keep the person away from the hazard.
- **D**iscipline. Ensure controls are monitored, reviewed and enforced.

Environment Agency

So what do we do with INNS?

We need to know what our hazards are.

- Chemicals
- Hot water
- Access
- Egress
- Weather
- The Public
- Moving plant/Vehicles
- Animals/Livestock
- Heavy equipment
- Contaminated water
- Transport (Driving)
- Dangerous Plants
- Insect Bites
- PPE
- Being hit by part of a plane falling out of the sky

Environment Agency

Generic Risk Assessments

- Most or all of the hazards from the previous slide will apply to all sites. We can quantify the risk overall and write method statements to cover them.
- These are know as Generic Risk Assessments and give a common means of control
- We can write these as Method Statements on how we should carry out the work in all cases.

Environment Agency

Site Specific Risk Assessments

- These will apply to a specific site or set of circumstances.
- They will include information gained from the client asking us to do the work and pre-commencement site visits.
- These need to be briefed to everyone working on the site, especially if there is a change of personnel part way through.
- We make sure that everyone signs up to them when working on a site.

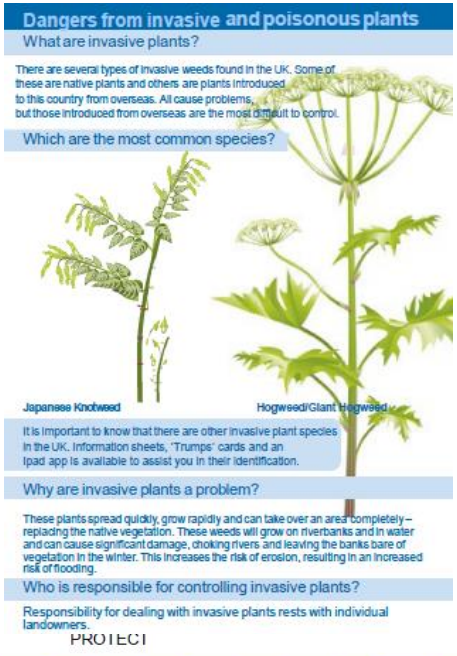
Environment Agency

Dynamic Risk Assessments (DRA)

- Dynamic=Moving
- In the outdoor environment conditions change constantly
- We need to be able to respond to hazards during work and know how to deal with them, find a safe way to continue or abandon the work
- Most of us know when something doesn't feel right.
- This needs to be recorded and learned from.

Environment Agency

So how do the EA do it?



Dangers from invasive and poisonous plants

What are invasive plants?

There are several types of invasive weeds found in the UK. Some of these are native plants and others are plants introduced to this country from overseas. All cause problems, but those introduced from overseas are the most difficult to control.

Which are the most common species?

Japanese Knotweed

Hogweed/Giant Hogweed

It is important to know that there are other invasive plant species in the UK. Information sheets, 'Trumps' cards and an Ipad app is available to assist you in their identification.

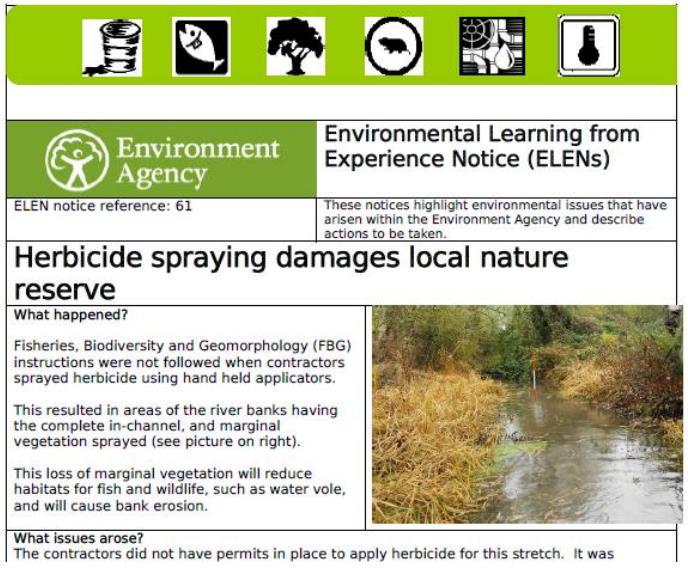
Why are invasive plants a problem?

These plants spread quickly, grow rapidly and can take over an area completely – replacing the native vegetation. These weeds will grow on riverbanks and in water and can cause significant damage, choking rivers and leaving the banks bare of vegetation in the winter. This increases the risk of erosion, resulting in an increased risk of flooding.

Who is responsible for controlling invasive plants?

Responsibility for dealing with invasive plants rests with individual landowners.

PROTECT



Environment Agency

Environmental Learning from Experience Notice (ELENs)

ELEN notice reference: 61

These notices highlight environmental issues that have arisen within the Environment Agency and describe actions to be taken.

Herbicide spraying damages local nature reserve

What happened?

Fisheries, Biodiversity and Geomorphology (FBG) instructions were not followed when contractors sprayed herbicide using hand held applicators.

This resulted in areas of the river banks having the complete in-channel, and marginal vegetation sprayed (see picture on right).

This loss of marginal vegetation will reduce habitats for fish and wildlife, such as water vole, and will cause bank erosion.

What issues arose?

The contractors did not have permits in place to apply herbicide for this stretch. It was

Environment Agency

Vegetation Control – Management operation instruction (MOI)

Operational instruction 552_06 — Issued 14/07/2017

What's this document about?

This OI provides information regarding weed control, grass control and cutting, whether near on in a watercourse. If you are unsure about anything, you must contact the Asset Performance team.

Who does this apply to?

This OI applies to all staff who plan and supervise any type of vegetation control and to those who carry out this work.

Contact for queries and feedback

- National Field Operations
- **Anonymous feedback for this document can be given** here

Contents

Safe and Well in the field

Giant hogweed contact prevention and precautions

Contains audio narration

Department for Environment Food & Rural Affairs

Next

Safe and well

Environment Agency

Environmental risks

- This presentation has been mainly about the Health and Safety of people but we must remember the environment at all tines. The Hazard/risk assessment should follow the same process.
- We have to be aware of unintended receptors and also ensure that our work dos not spread Non Native Invasive Species through carelessness.

Environment Agency