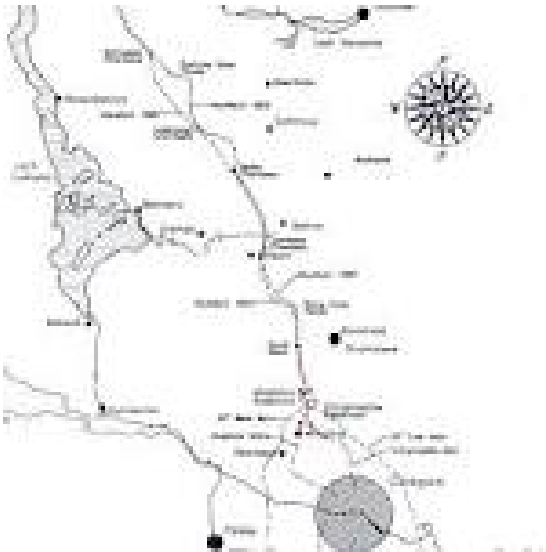


Public Health Risks and Impact from Beavers

Responsibilities and duties



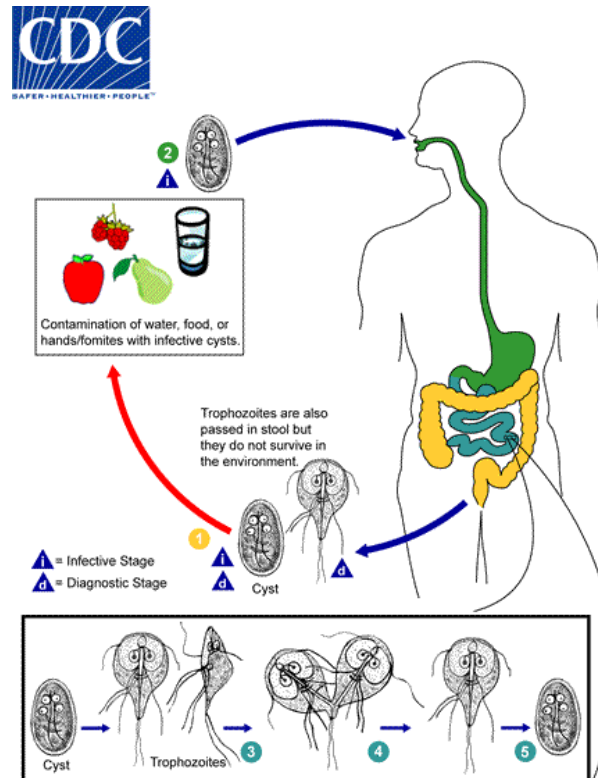
Risks to modern society:

Infrastructure interference and damage



Loch Katrine Water supply
Aquaducts

Public Health



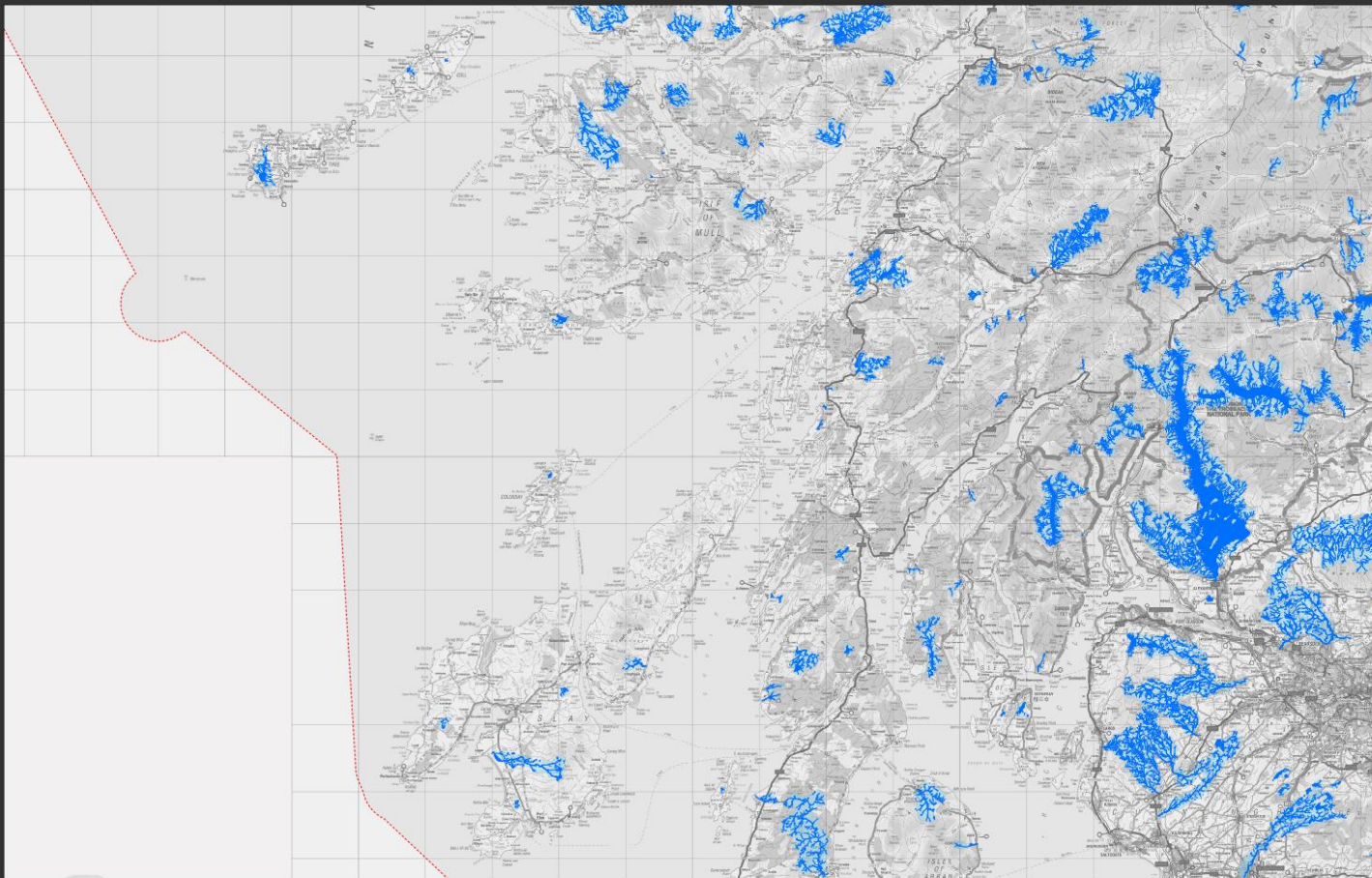
What is giardiasis?

Giardiasis is an infection you can get in your small intestine. It is caused by a microscopic parasite called *Giardia lamblia*. Once you have been infected with the parasite, it lives in your intestines. It is passed along through faeces. Anything that comes in contact with faeces from an infected person or animal can become contaminated. Giardiasis is one of the main causes of diarrhea. It can be found all around the world.

Regulated Protected & Priority areas

Would you like to set Microsoft Edge as your default browser?

Set as default

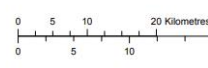


Drinking Water Protected Areas (Surface Water) in the Scotland River Basin District
Map 2 of 11

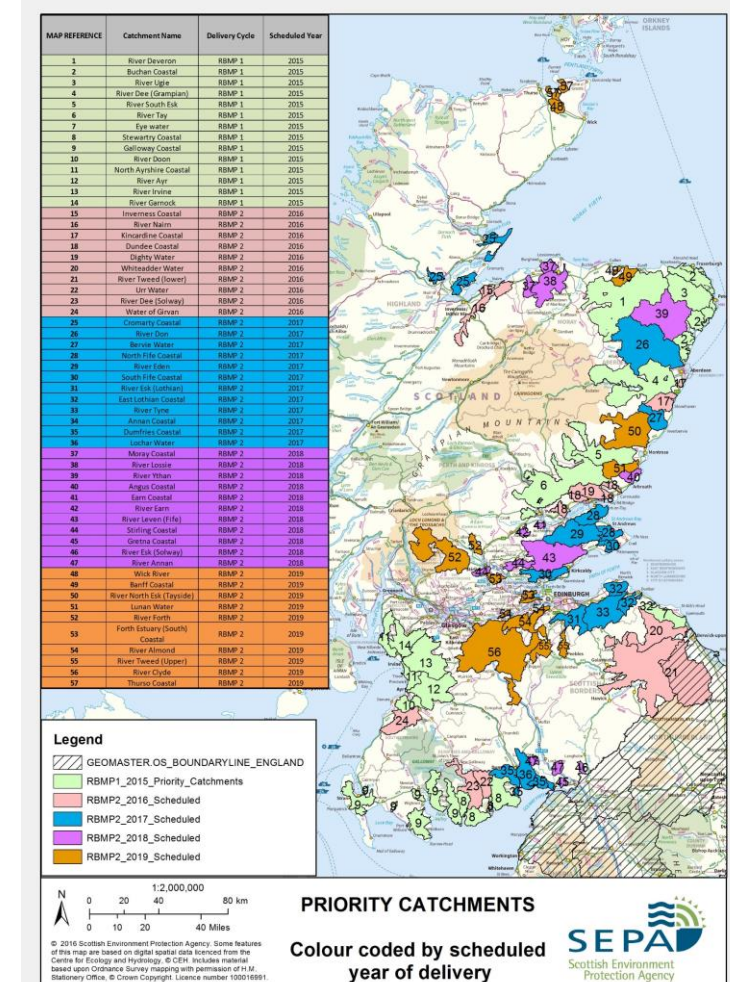
Legend
 Drinking Water Protected Areas (Surface Water)
 Scotland River Basin District boundary

This map is number 2 from a series of maps numbered 1 to 11 which collectively identify the bodies of surface water referred to in Article 2(1) of the Water Environment (Drinking Water Protected Areas) (Scotland) Order 2015. It is prepared for the purposes of that Order in accordance with section 6(2) of the Water Environment and Water Services (Scotland) Act 2003.

Signed: _____
 Dated: _____
 A member of the staff of the Scottish Ministers



Map data: Ordnance Survey, 2015
 Map design: Scottish Environment Protection Agency, 2016
 Map production: Scottish Environment Protection Agency, 2016
 Map projection: Scottish Environment Protection Agency, 2016



Facts:

Do beavers get beaver fever/Giardia?

Animals known to carry Giardia include humans, dogs, cats, beavers and possibly sheep.

Beaver have a roaming behaviour in water courses (all sub species) all countries

In the United States, Giardia infection is the most common intestinal parasitic disease, and it affects more than 1 million people per year. Infections amongst employees in Tayside.

In Ontario, Canada, between 2003 and 2009, there was an average of 12 confirmed cases of giardiasis reported per 100,000 persons each year.

The beaver has gained attention as a potential source of Giardia contamination of lakes, reservoirs, and streams. People become infected by accidentally swallowing Giardia and can carry the parasite in their bodies from a few weeks to a few months.

The Beaver trials in Knapdale, Argyll were not in a relatively developed area with Victorian infrastructure of national importance, protected by Drinking water legislation, serving 1.5m people, nor was the area known for large scale open water swimming - the human interface was low.

Loch Lomond water quality (and other Lochs) is currently mostly acceptable to Drinking Water Standards and will be at risk in the long term.



Infrastructure



Physical risks:

- Blockages
- Infestations
- Disease
- Equipment interference
- Impact to septic tanks, small treatment plants, private water supplies, interference with water levels,
- Supply interruption
- Operative exposure
- Outfall blockages and back up property floods.



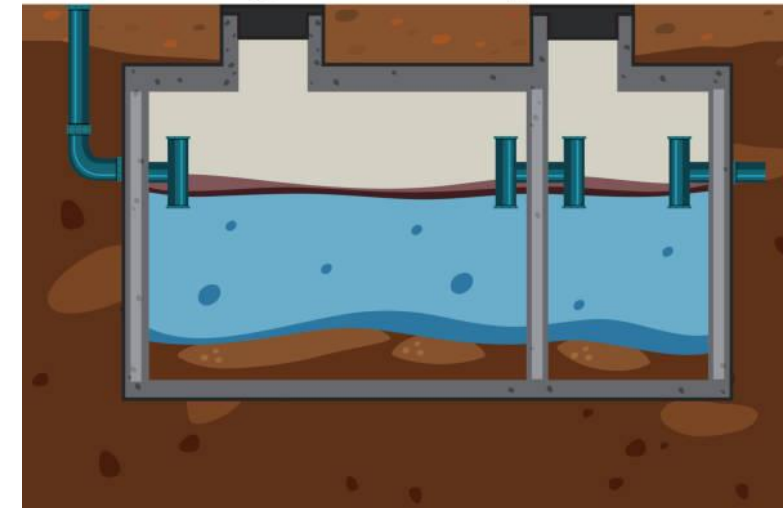
History of our infrastructure

First Designed and Built in 1850s when Beavers were extinct, additional public and private infrastructure has been built ever since – none with consideration to Beavers.

The Beaver Strategy appears to have ignored all “modern” infrastructure developments serving millions of people or small populations and communities in their risk evaluations.

SEPA have not sufficient data to make an informed view of private infrastructure.

Underground Septic Tank



Regulator investigations needed before Beaver Licence to ascertain the method & cost of mitigations to the “responsible party”.



SEPA - assess impact to flooding, disease, regulatory catchment zones, design standards and impact to fresh water – no funds!



Funding given to support Beavers before any meaningful studies! Failure to protect Environment Contradicts the constitution including their own Out Door Recreation Plan and impact on Tourism.



Not consulted by RSPB. Scot Gov/Nat Scot should consult with their own Regulator in Public interest – prosecution powers



Trusted to serve Scotland

Will wait impact and pass cost to customer, unquantified. Third party expertise required. Very reactive corporate behaviour.



Expected illness increase from workers and recreation. No method of cost recovery so Giadiassis just adds to burden of NHS and taxpayers challenging critical services.

Responsible party is responsible for consequential losses – but who is it?

RSPB will be responsible for Beaver release consequential losses if they do not contain the release.

But,

RSBP claim Nat Scot will be responsible for Consequential losses and mitigations but Nat Scot don't agree!

Is there a legal agreement passing on the liability or is this just talk by RSPB?

Does Nat Scot have money – how much? – more tax ? Who will really pay?

Does this just pass the cost back to Scottish Water, NHS – the taxpayer or will RSPB pay the full impact costs?

The capex cost for monitoring and resolving Cryptosporidium was millions, Giardia is another layer analysis and report!

The impact of Beavers will develop over many years – a long term insurance is required.

Who will pay for unquantified losses to tourism and infrastructure and why are LLNP not interrogating this risk?

Open Water swimming events may leave the area after the first outbreak.

LLNP are failing to exercise due diligence until evidence is presented.

Will the true cost to the taxpayer ever be quantified?