

Tackling the “Too-Hard Basket”

- An approach to complex PSIs

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Every PSI is its own snowflake (and can snowball)

Three common themes which can cause a PSI to become, fairly complex, fairly quickly

The Place

Large sites = a lot of information to review.

The Past

Complex land use histories make it hard to separate signal from noise.

The People

Findings often need to land with multiple audiences so presentation matters

Ex-Industrial Site, Taranaki Region

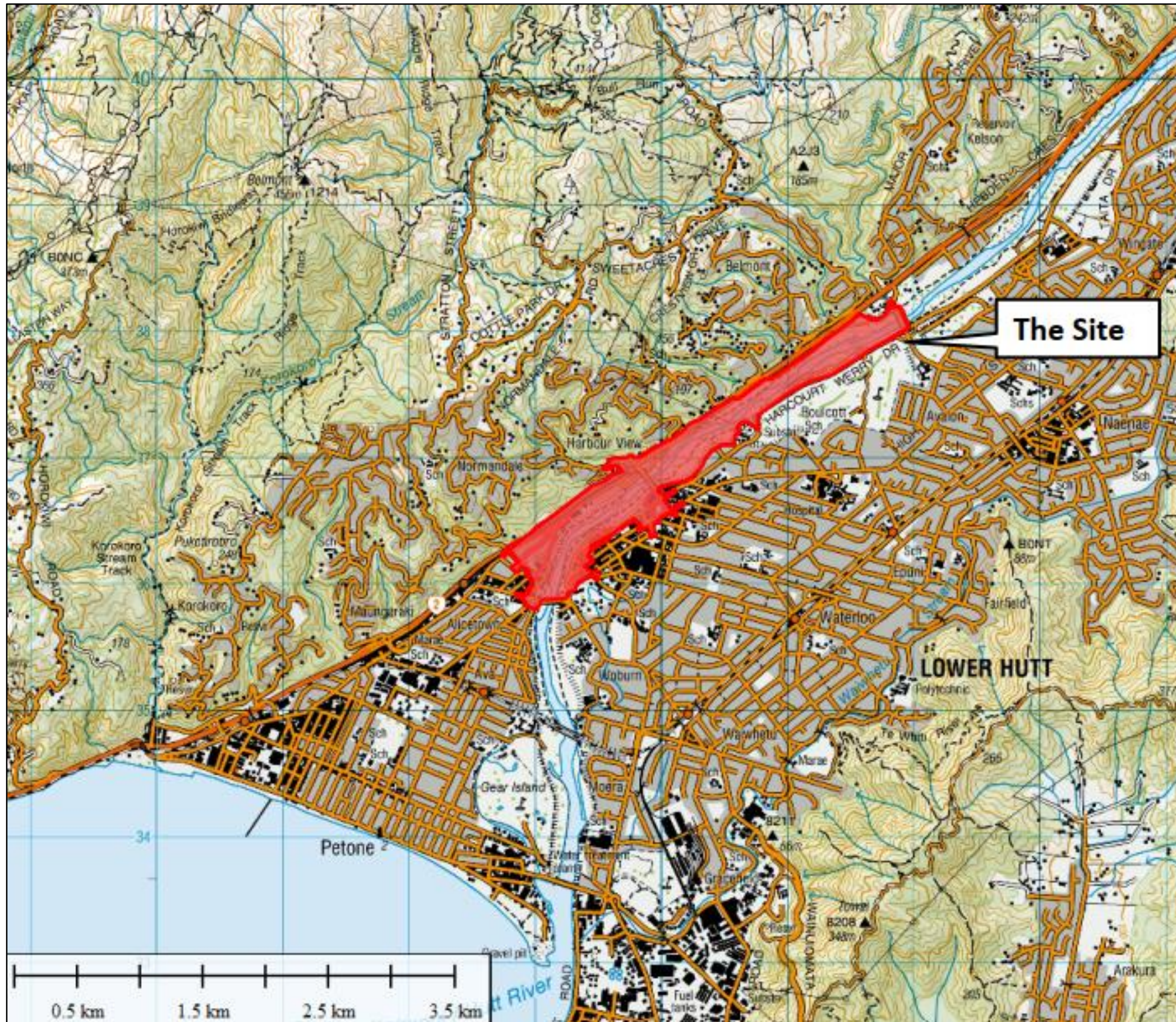
- Approx. 16 ha site

- Multiple potentially contaminating activities (HAIL) identified
- Former manufacturing plant
- Operational footprint expanded over time
- Changes in ownership

- Multiple review iterations
- Supporting subsequent site investigations



Riverlink, Lower Hutt



Site location plan Topomap sourced from Land Information New Zealand (crown copyright reserved).

- Approx 120 ha site with numerous land uses
- Multiple HAIL categories identified (scale-driven)
- global consent was being sought for the development

- Multiple report review iterations
- Phased investigation approach given accessibility constraints
- Investigations influenced by design details



Ōtaki to north of Levin: Te Pae o Tararua

- T+T prepared an addendum to an existing PSI

- Approx 2,400 ha site with numerous land uses



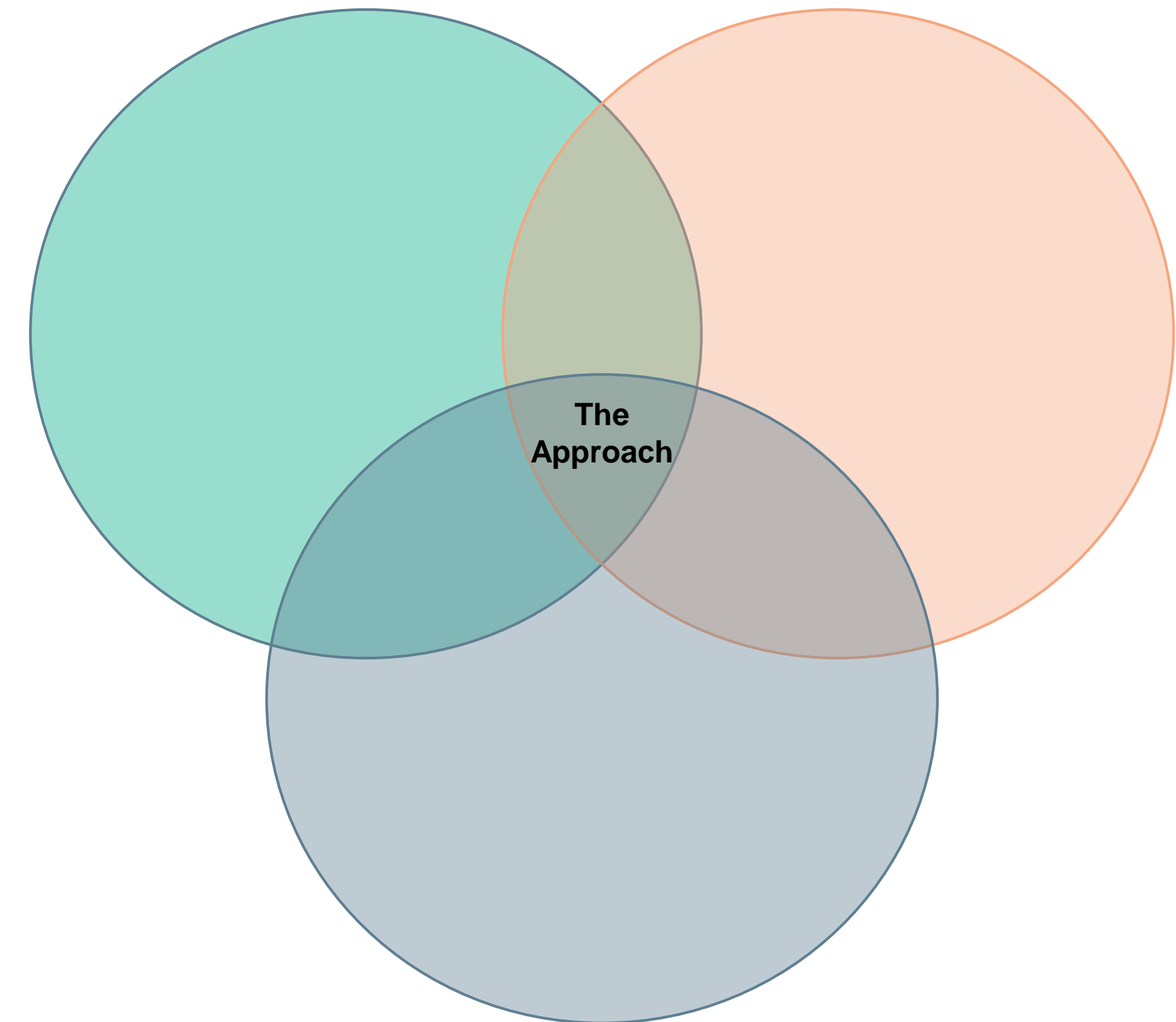
- Limited by time/access
- Consent relied on the PSI & further investigations & a robust CSMP
- CSMP developed as a shared document
- CSMP included a “risk” matrix
- Investigation approach informed by wider aspects of the project

Complexities in a nutshell...



The Approach – Information registers (initially)...and ‘risk’ matrices (eventually)

- A register acts as a tool to collate and track the information
- Acts as a centralised resource for all parties
- Digitizing these helps:
 1. Information accessibility, and
 2. Always presenting the most up-to-date information.
- For subsequent phases, registers provide a solid foundation
- With large datasets, categorization can guide early decisions (e.g., prioritizing areas)
- Onsite, those preliminary categories get confirmed – or overturned – by data



In application...



Above: Approximate location of HAIL areas identified as part of PSI

Activity ID	Title - Potential Activity	HAIL_Category	Source (Record, Appendix C)
1	Drum storage	A17. Storage tanks or drums for fuel, chemicals or liquid waste	Records 4, 41, 44, 55
2	Drum storage	A17. Storage tanks or drums for fuel, chemicals or liquid waste	Records 4, 55, anecdotal evidence
3	Drum storage	A17. Storage tanks or drums for fuel, chemicals or liquid waste	Record 4
4	Drum storage	A17. Storage tanks or drums for fuel, chemicals or liquid waste	Record 4
5	Drum storage	A17. Storage tanks or drums for fuel, chemicals or liquid waste	Record 4
6	Equipment storage	A17. Storage tanks or drums for fuel, chemicals or liquid waste	Records 4, 46, 49, 53, 55
7	Substation	B4. Power stations, substations or switchyards	Record 4
8	Substation	B4. Power stations, substations or switchyards	Record 4

Above: Select information of register detail associated with each entry



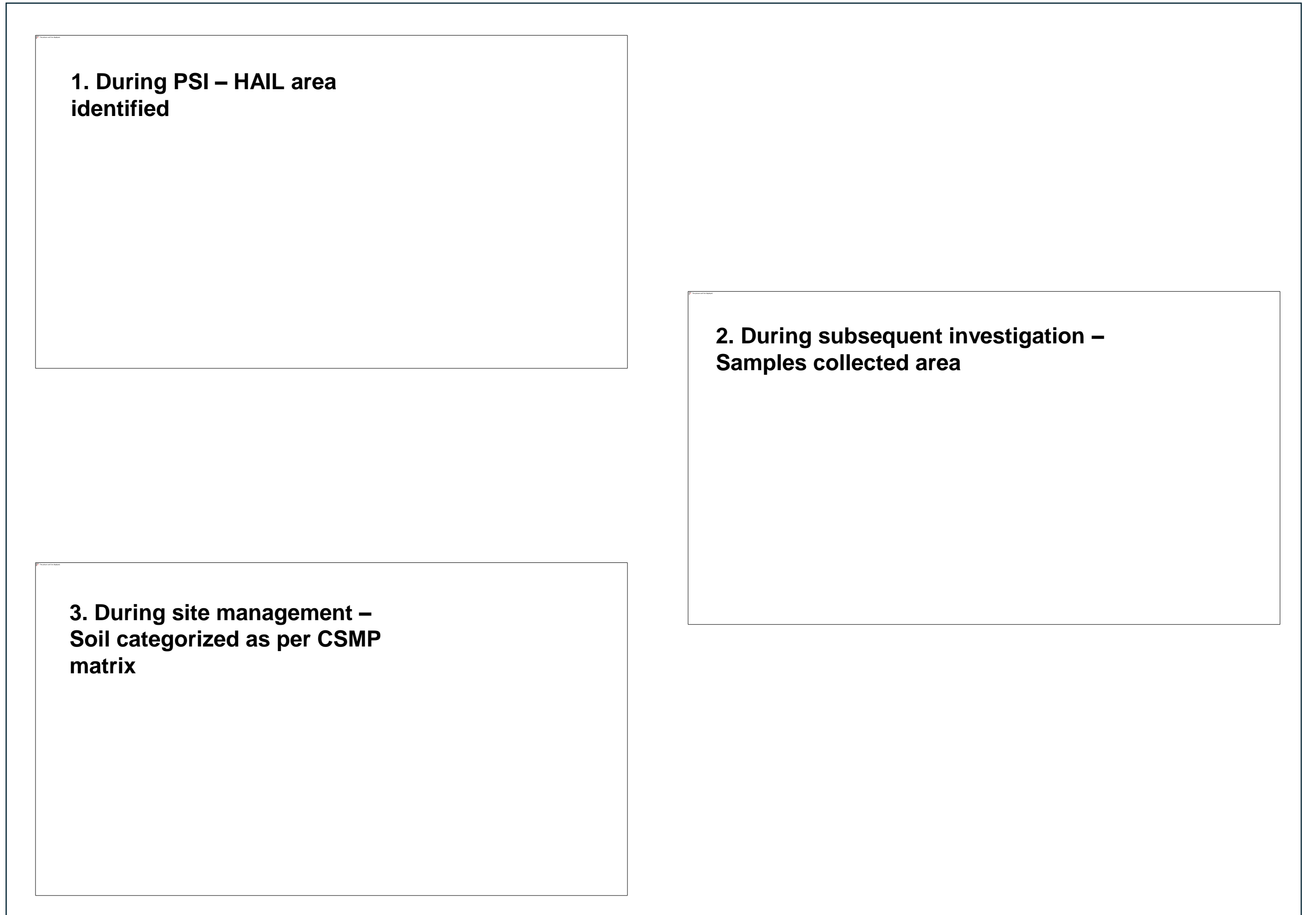
Level of risk	Shown in tables as follows
<p>Low risk:</p> <p>The activity identified is unlikely to result in significant soil contamination above background concentrations. There is likely to be a low risk to human health and ecological receptors or the RiverLink project.</p>	
<p>Moderate risk:</p> <p>The activity identified is likely to have resulted in localised soil contamination. Soil contaminants may be at concentrations exceeding background concentrations and above guideline values for protection of human health and ecological receptors. Areas with soils containing elevated contaminants will require management or remediation in accordance with a SMP or Remediation Action Plan (RAP).</p>	
<p>High risk:</p> <p>The activity identified is very likely to have resulted in widespread soil contamination. Soil contaminants are likely to contain significant concentrations of contaminants exceeding guideline values for protection of human health and/or ecological receptors. Soils containing elevated contaminants will require remediation in accordance with a SMP and/or RAP and may require pre-treatment prior to disposal.</p>	

Above: Risk criteria as shown in PSI





Above: Extent of O2NL designation - southern alignment.



Above: Schematic of generalized workflow.

Summary



Development of robust management systems to collate the information.

Take into account the following lessons...

