# Nivethini Jekku Einkaran CDNS 4403-5403

Sustainable Heritage Case Study Additional information

# Interweaving Traditional Knowledge in managing Nuclear Waste

### Adaptive Phased Management

#### Technical method

- Centralized containment and isolation of used nuclear fuel in a deep geological repository
- Continuous monitoring
- Potential for retrievability
- Optional step of temporary shallow underground storage (not currently included in the NWMO's implementation plan)

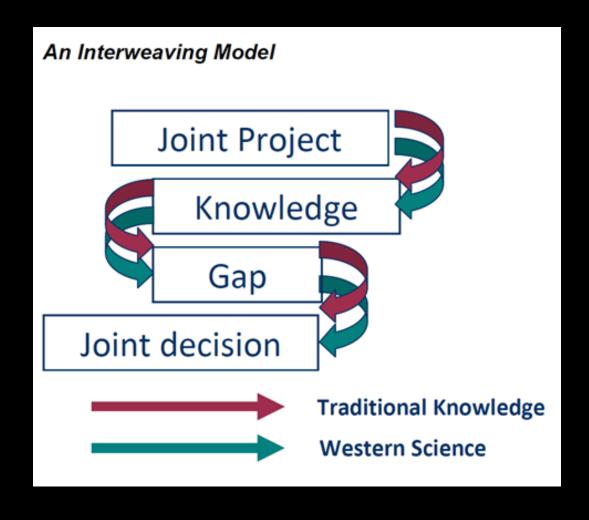
#### Management system

- Flexibility in pace and manner of implementation
- · Phased and adaptive decision-making
- Responsive to advances in technology, research, Indigenous Knowledge, and societal values
- Open, inclusive and fair siting process to seek an informed and willing host
- Sustained engagement of people and communities throughout implementation

# The nine-step process

| Step 1 | NWMO initiates the process                                       |
|--------|--|
| Step 2 | Initial screening  |
| Step 3 | <u>Preliminary assessments of suitability</u>                    |
|        | Phase 1 Desktop Studies and Engagement                           |
|        | Phase 2 Field Studies and Expanded Engagement                    |
| Step 4 | Detailed site evaluations  |
| Step 5 | Confirm acceptance to host the project                           |
| Step 6 | Formal agreement to host repository                              |
| Step 7 | Regulatory review and Approval process                           |
| Step 8 | Construction and Operation of Underground Demonstration Facility |
| Step 9 | Construction and Operation of Facilities                         |

#### The Interweaving Model



The model derived from Traditional Knowledge Project, (2008).

Retrieved from https://www.nwmo.ca/~/media/Site/Files/PDFs/2015/11/04/17/32/916\_NWMODR-2008-03ReportofTraditionalKnowledgeProject.ashx?la=en.

## Current Storage Facilities



Interim storage locations (n.d.).

Retrieved from

## **Current Storage Facilities**



At present, the Used Nuclear Fuel, which is in a solid form, is stored in storage pools or dry storage containers, (n.d.).

Retrieved from

#### Reconciliation Strategy, 2020 and Beyond

• In addition, NWMO has plans to develop a corporate reconciliation assessment tool; enhance scholarships and donations program to include a focus on reconciliation. As a part of their reconciliation strategy, NWMO has plans to enhance human resources, practices and procedures to address reconciliation; develop an Indigenous Youth strategy to include a scholarship program and recruitment strategy; enhance procurement program to include an Indigenous strategy (NWMO, Indigenous Engagement, n.d.).