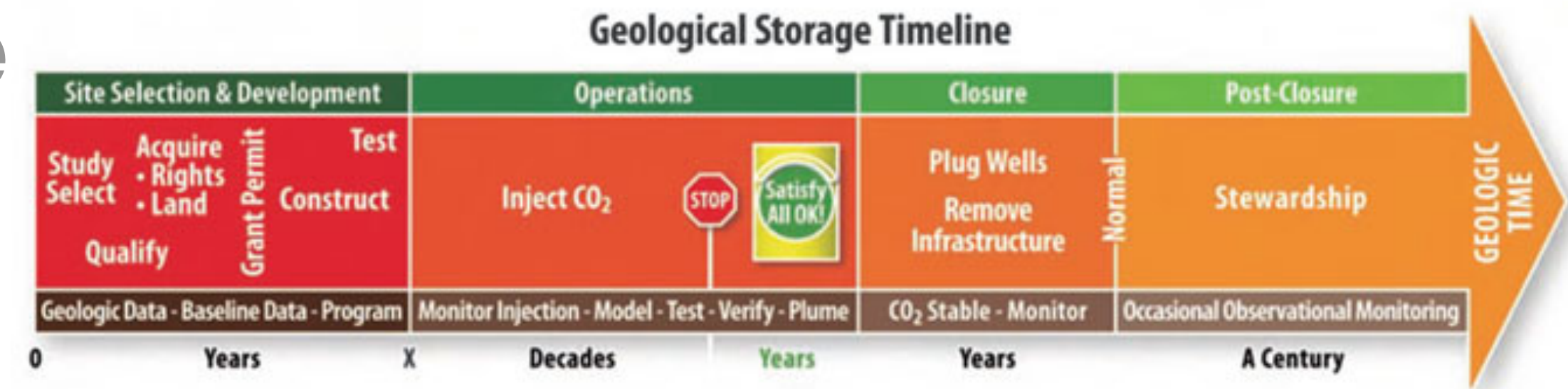


# Geological Storage Timeline



**Fig. 2.4** Main phases of a CO<sub>2</sub> storage project (from Cooper et al. 2009; Reproduced with permission, CO<sub>2</sub> capture project, [www.CO2captureproject.org/](http://www.CO2captureproject.org/))

Rock systems are inherently complex define the storage system and the volume around it

- ▶ The *sedimentary basin* which contains the proposed storage units;
- ▶ The *storage complex* which defines the storage reservoir(s) and sealing units;
- ▶ The *storage unit(s)* themselves, referring to specific geological units;
- ▶ The *sealing formations and faults*;

- ▶ *Sufficient data shall be accumulated to construct a volumetric and three-dimensional static (3-D)-earth model for the storage site and storage complex, including the caprock, and the surrounding area, including the hydraulically connected areas.*
- ▶ EU defines 'Leakage' as any release of CO<sub>2</sub> from the *storage complex*
- ▶ 'Significant irregularity' means 'any irregularity in the injection or storage operations or in the condition of the storage complex itself, which implies the risk of a leakage or risk to the environment or human health.'

from Philip Ringrose

