



South Bruce Nuclear
Exploration Project

nwmo

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Aggregate Resource Study

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Aggregate Resource Study

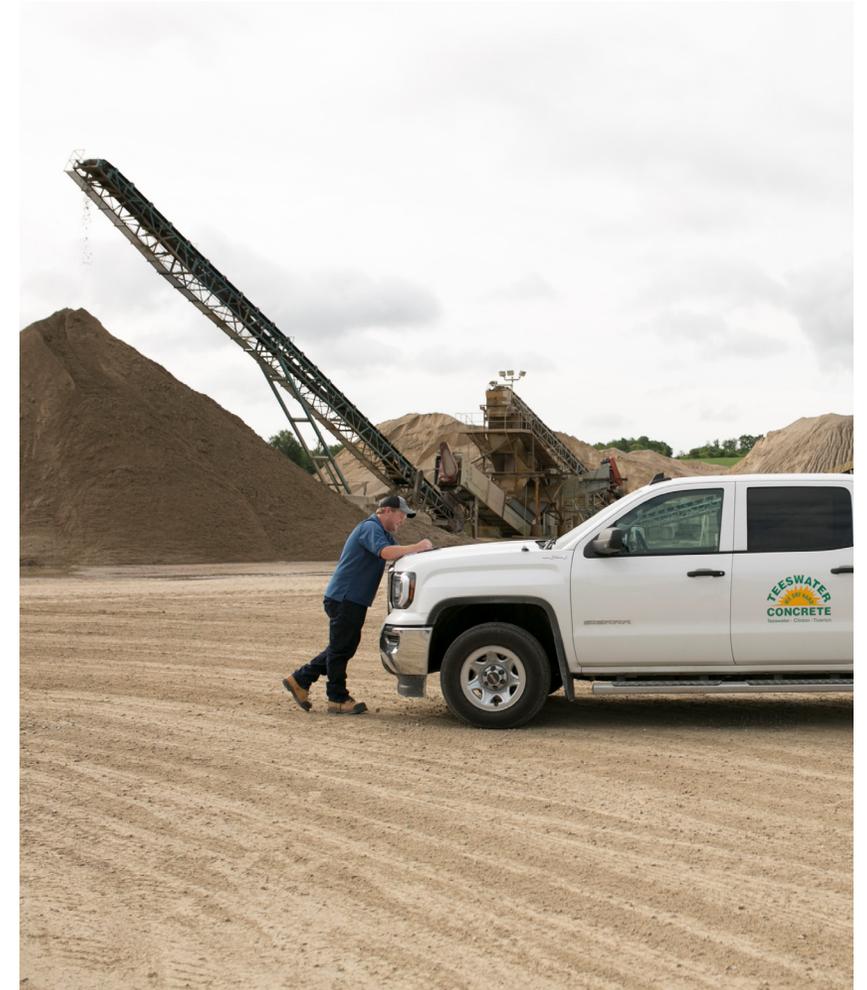
- Why are we studying aggregate resources?
- How much aggregate is in the study area now?
- How much aggregate will the Project need?
- Is there enough aggregate in the Study Area to supply the Project?
- Will the Project impact the existing aggregate market?

The Aggregate Resource Study (I21) is a joint NWMO/South Bruce study and available for download at <https://www.southbruce.ca/en/municipal-government/studies-and-reports.aspx>

About Aggregate Resources

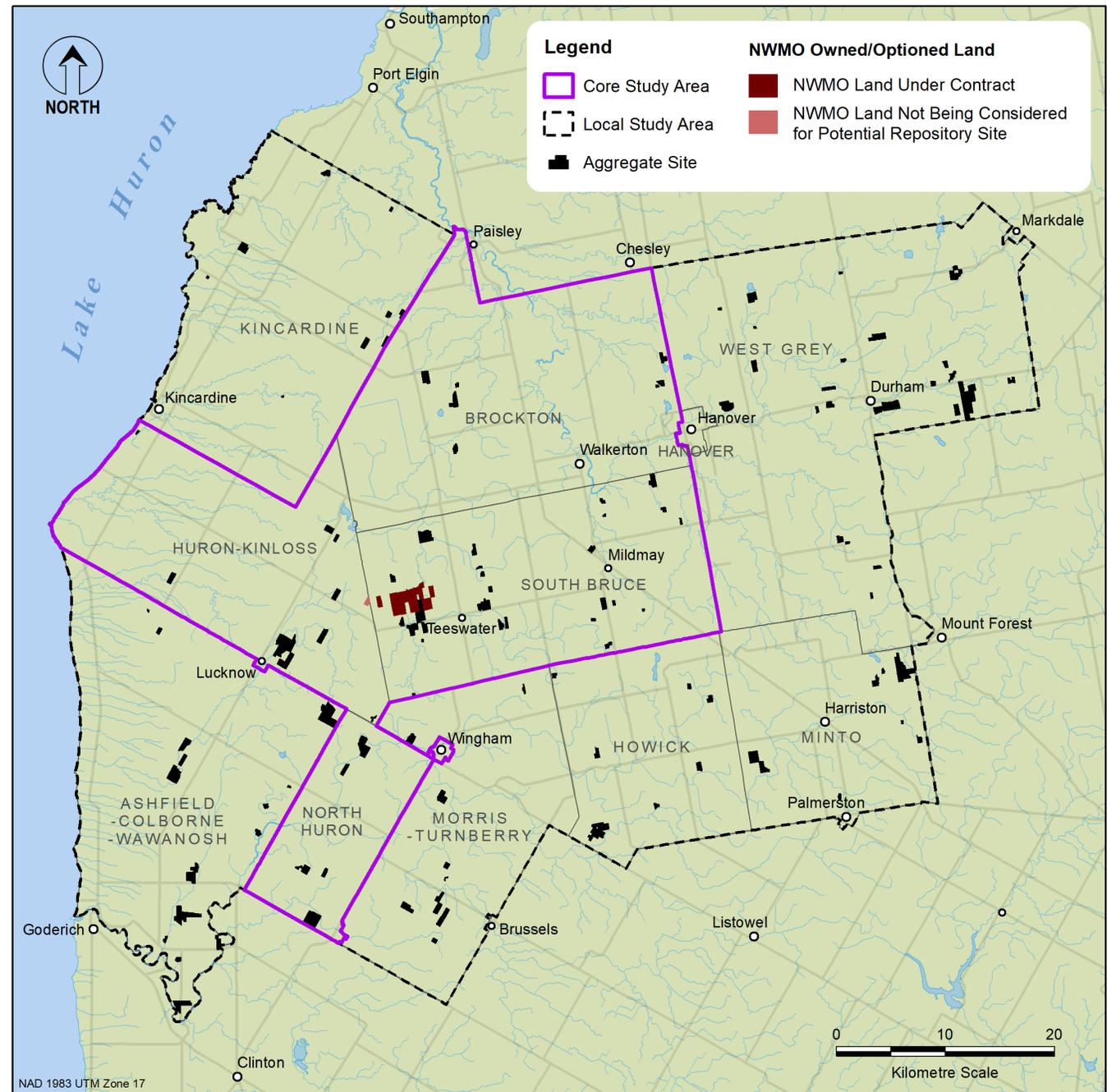
Aggregate Resources are extracted sand and stone, including gravel, used in construction or manufacturing

- Aggregate is critical for most community infrastructure. Sand and gravel is used for road beds, bridges, concrete for buildings, and as bedding for underground utilities like water and wastewater pipes.
- There are many aggregate pits in South Bruce right now that provide sand and gravel to the community.
- The Project will require a significant amount of aggregate.



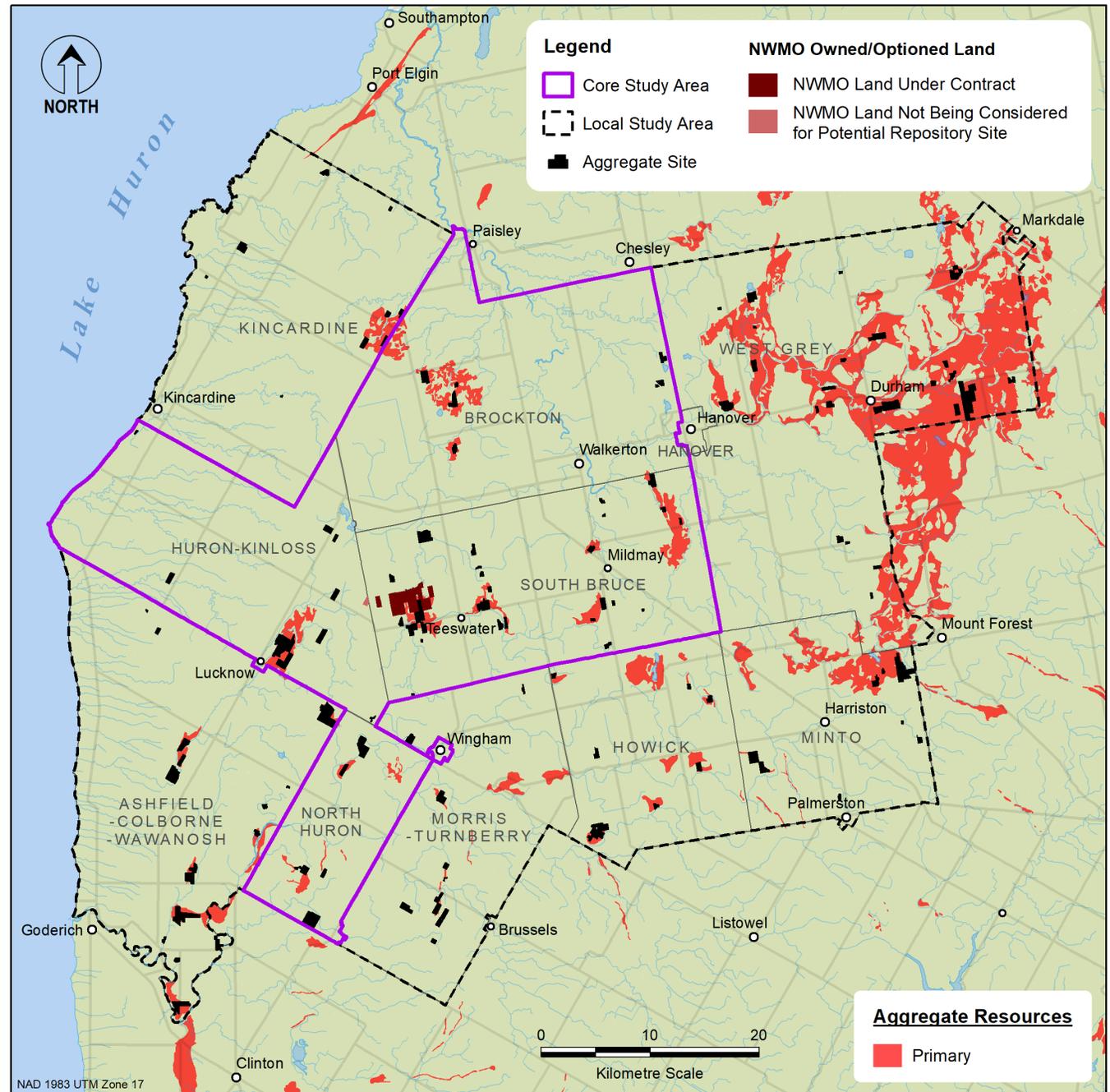
Aggregate Supply in the Local and Core Study Areas

- Aggregate Sites are located throughout the Core and Local Study Areas
- About 1 million tonnes of aggregates are extracted every year at sites in South Bruce - about 17% of the licensed available production



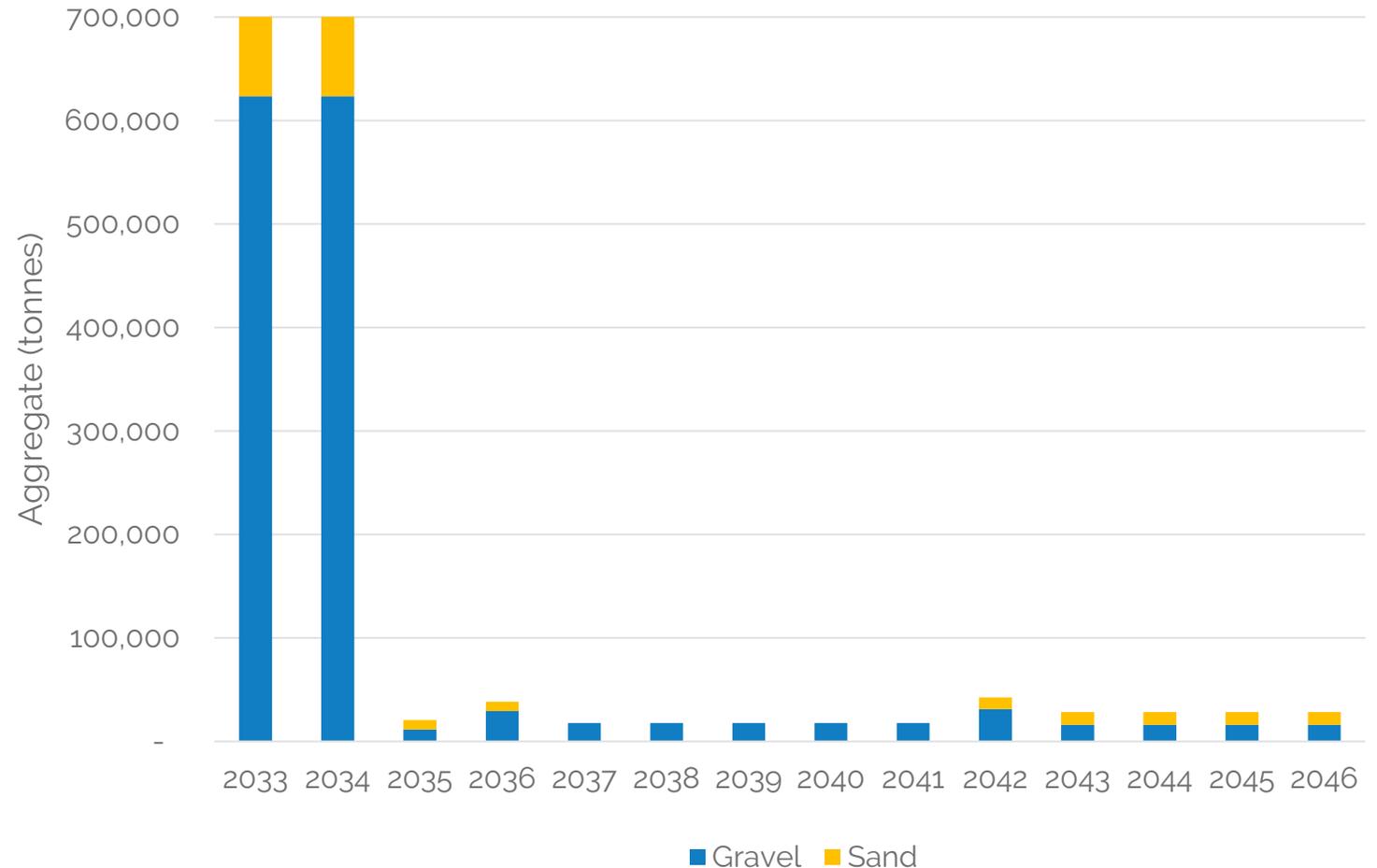
Aggregate Supply in the Local and Core Study Areas

- Beyond the currently licensed sites, there are extensive deposits throughout the Core Study Area where high quality sand and gravel are known to exist



Needs of the Project

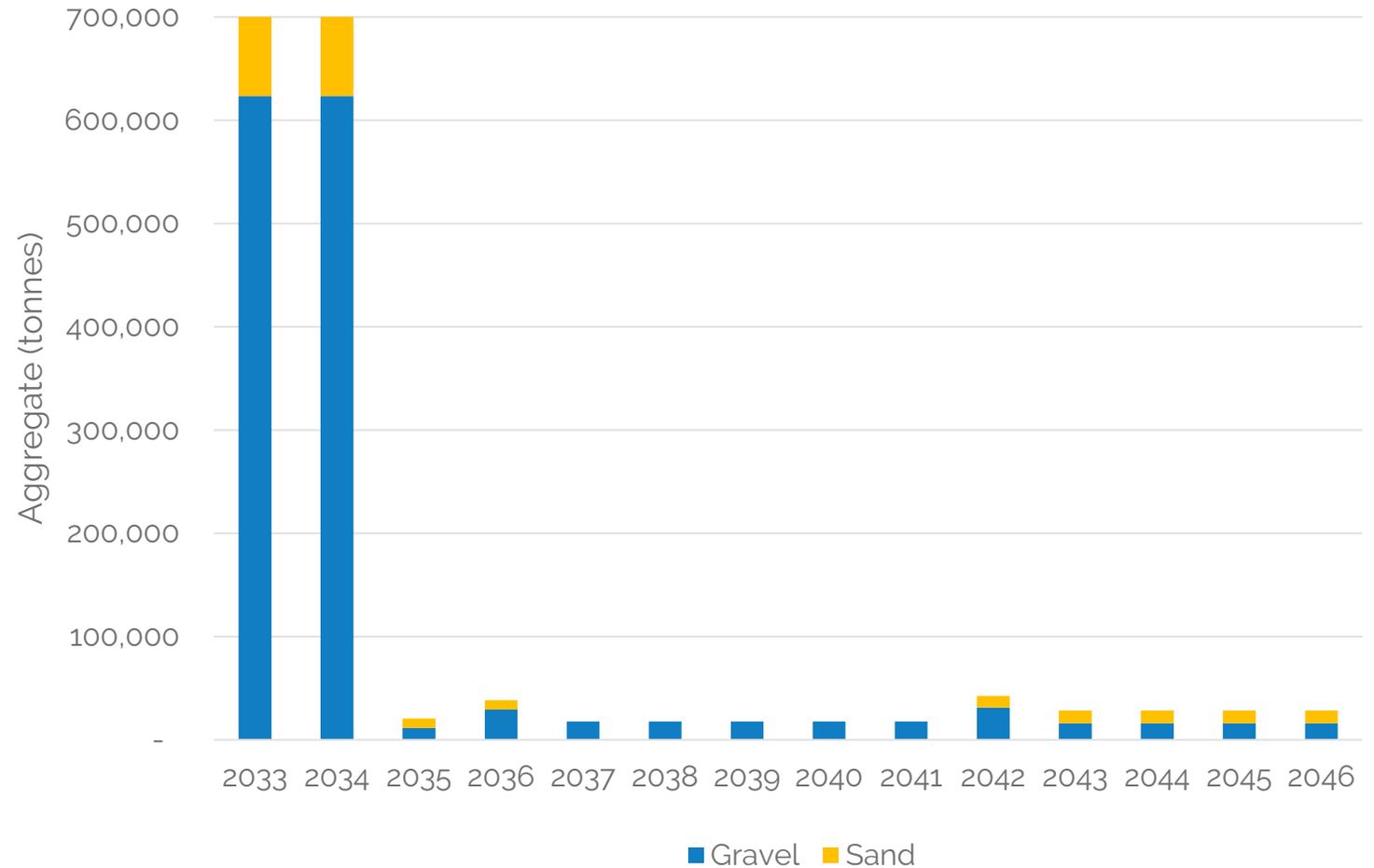
- The Project will require a significant amount of aggregate for:
 - Site preparation
 - The underground DGR
 - Surface facilities such as buildings
- In addition, aggregate will be required for off-site infrastructure upgrades, like roads, utilities, and bridges
- Some of the aggregate needed for the Project will be reused from underground extraction at decommissioning.
- No excavated material will be made available for outside commercial use.



Source: Keir using NWMO Project Planning Assumptions (NWMO, 2021)

Impact of the Project on Aggregate Resources

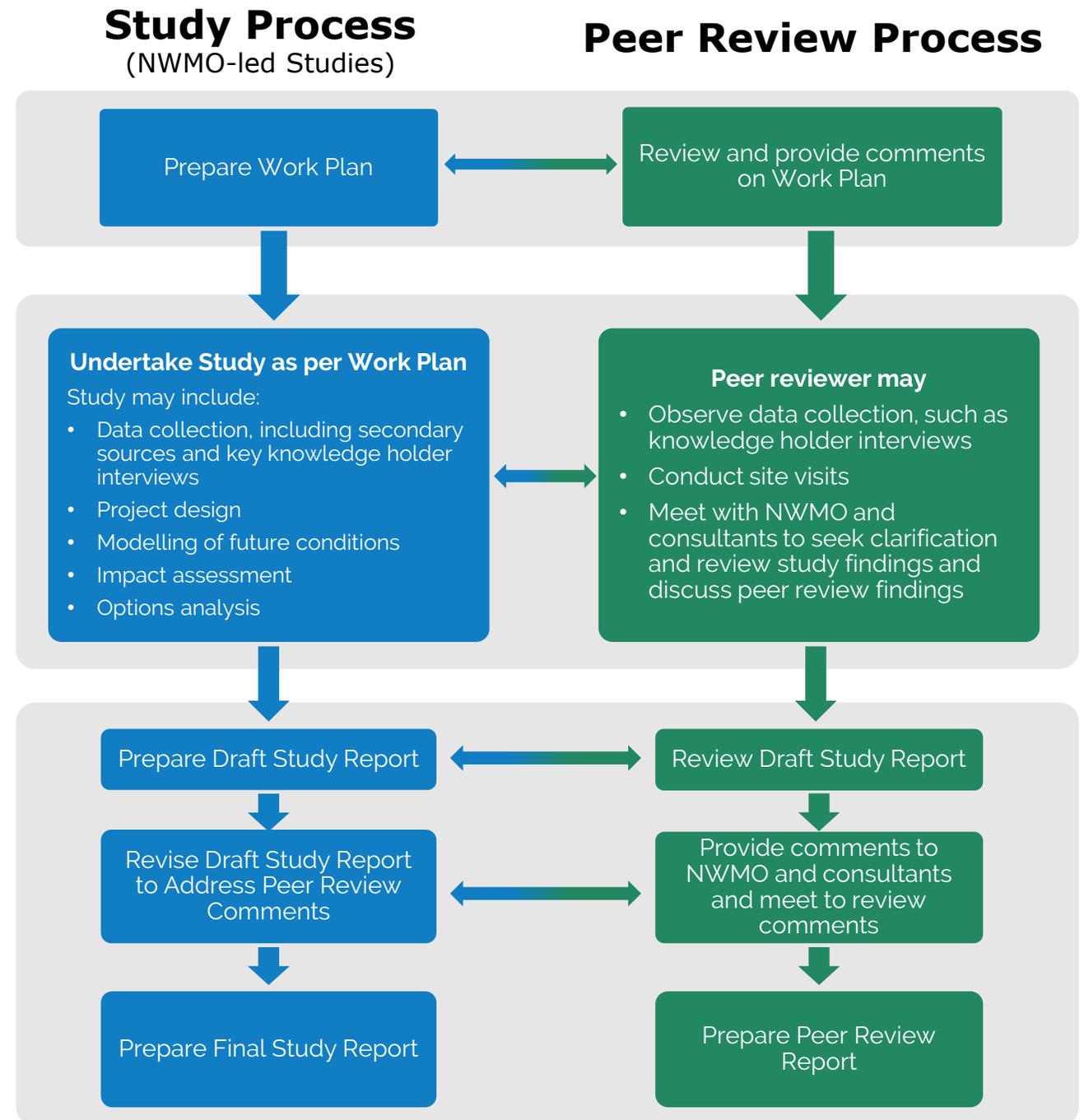
- During the 2 years of site preparation, the Project will increase the demand for aggregates
- The peak aggregate needs of the Project can be met by the total licensed extraction capacity
- Demand for community growth and project needs is still being developed



Source: Keir using NWMO Project Planning Assumptions (NWMO, 2021)

Collaborative Peer Reviews

- NWMO-led studies are being Peer Reviewed by South Bruce's independent subject matter experts
- Process is guided by the Peer Review Protocol
- Carried out on a continuous, interactive basis throughout the Study preparation process
- Independent assessments of Study findings
- Helps inform how the study addresses the Guiding Principles



Peer Review Results

Joint Study led by NWMO
and South Bruce with
peer review by South
Bruce consultants

Aggregate Resource Study (I21), Keir Corp

Peer reviews conducted by R. J. Burnside and Associates

- Study provides an initial assessment to address the Study objective.
- Future studies recommended on remaining inventory of aggregate and approach to production.
- Study was not able to provide a complete analysis of aggregate demand since aggregate demand for infrastructure improvements expansion and housing/community growth have not yet been determined.
- Additional assessment of the aggregate demands is required to meet the full objective of the Study once the requirements for infrastructure and community growth are identified.
- Future studies are recommended to consider the impact of excess excavated rock on the potential site and area, and opportunities to reuse this resource

Summary

- Study addresses guiding principles related to protecting the natural environment (#2), minimizing the footprint of surface facilities (#6), supporting local businesses (#21), upgrades to the road networks (#30), and road maintenance (#31).
- The Project will require a significant amount of aggregate.
- The existing licensed extraction capacity is more than adequate to meet the needs of the Project. A shortfall of supply is extremely unlikely.
- Even if NWMO reuses aggregates extracted during mining, there will likely be excess material that will need to be managed.
- No excavated rock will be made available for outside commercial use. Notwithstanding, extracted rock could be valuable for public projects that wouldn't be possible if they had to pay market price.
- The impact of moving aggregates to and from the Site will be addressed in future presentations on traffic and roads.



Questions?

