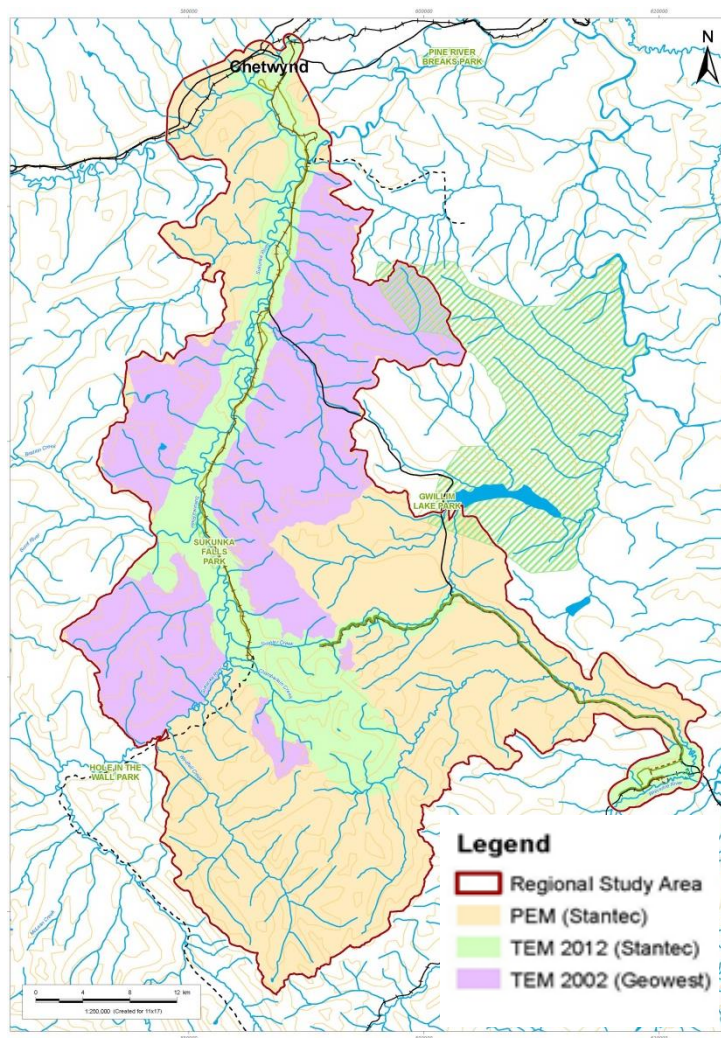


Improving Ecological Information through Predictive Ecosystem Modeling (PEM)

EMA of BC AWARD CATEGORY: Environmental Assessment
PROJECT OWNER(S): Stantec, Glencore

LEAD MEMBER ORGANIZATION: Stantec
LEAD ENVIRONMENTAL MANAGER: Terry Conville, Senior Ecologist

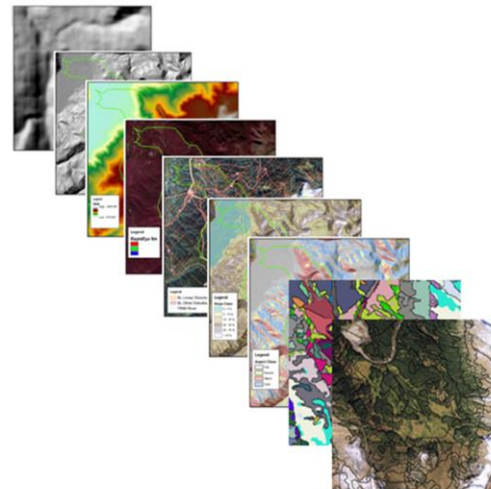


Study Area

Sukunka River Valley/ Northern Rocky Mountains, near Chetwynd, BC

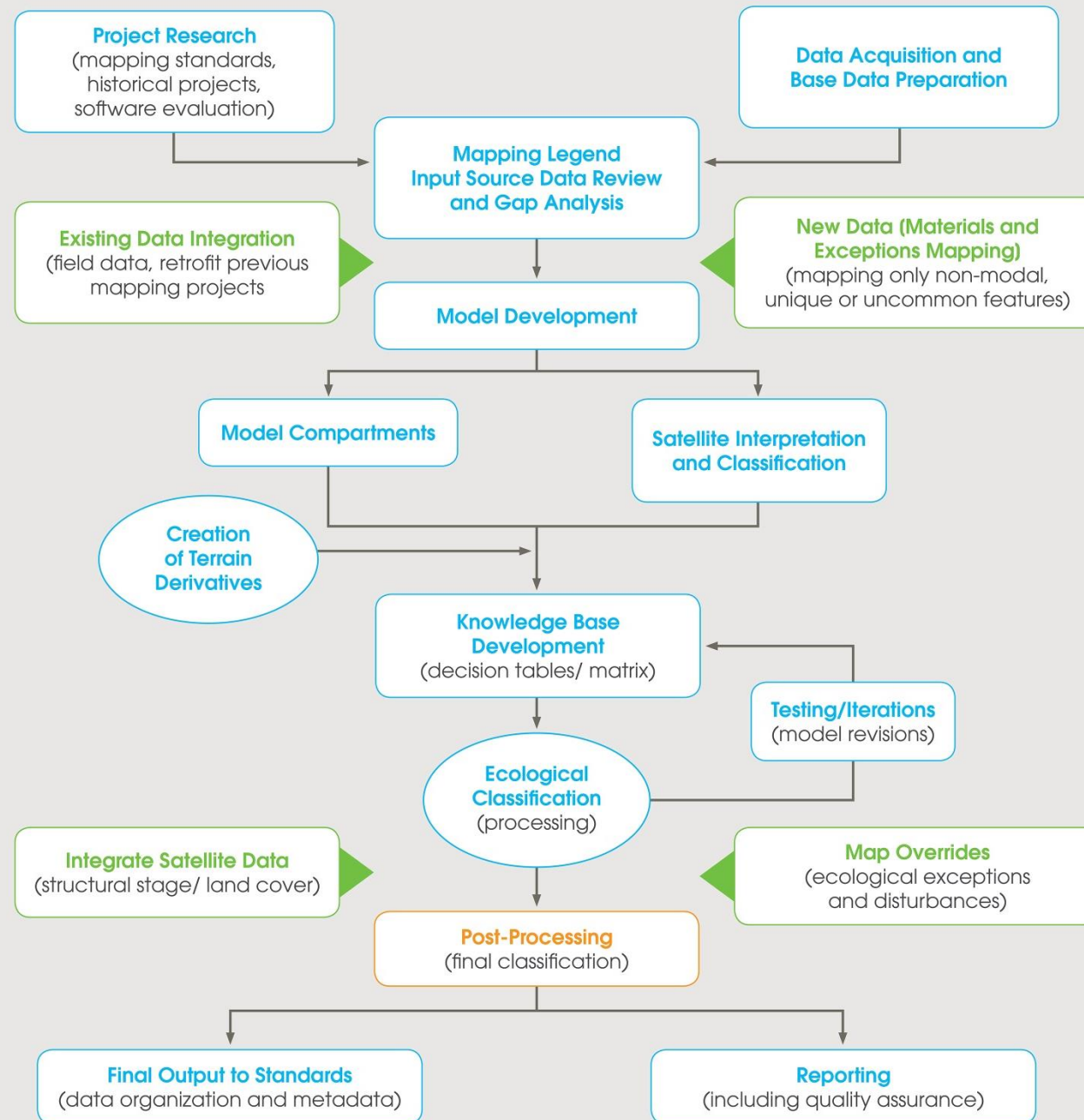
PEM is an ecosystem data product

created by combining modern analysis tools, remote imagery advances, and expert knowledge in an innovative process to predict ecosystems –

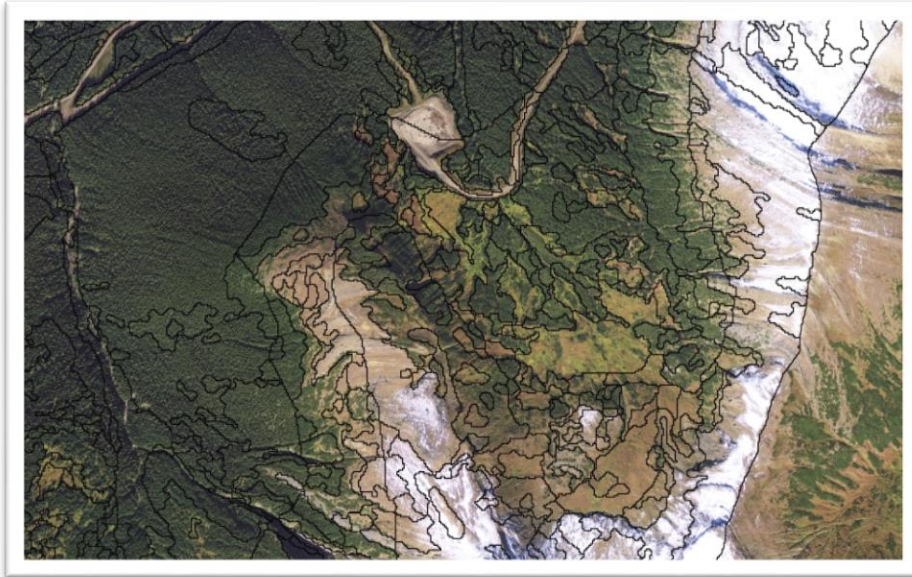


...it improved upon traditional methods of data acquisition and analysis

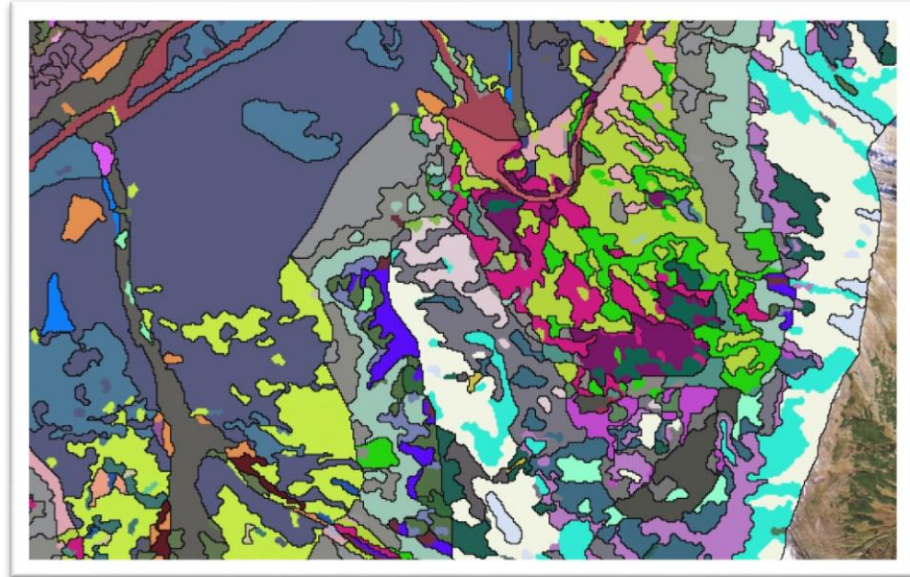
Sukunka PEM Process Overview



Sukunka PEM Example Results



Distinct units mapped that 'make sense' ecologically



Resultant output can be presented for a single use purpose (map) and also revised/updated over time

PEM provides

key information for resource managers, and reduces risks and costs for industry by providing:

- Spatially and thematically explicit ecological information
- Confidence in post-development land capability predictions
- Long-term data management
- A flexible and repeatable process for simplified updates and change monitoring

Which in turn provides

reliable, scalable, and cost effective ecological information for:

- Site planning/constraint identification
- Wildlife habitat identification and use
- Species and communities at risk planning
- Productivity, wetland, and traditional use evaluation
- Cumulative effects assessment
- Reclamation planning
- Biodiversity monitoring