

2026: Land 1-year Roadmap

Major Goal	Epics	Start Date	Due Date
Eliminate negative runoff in coupled ELM-MOSART-MPASO	1. Implement and test dynamic lakes in ELM & MOSART	1/26	12/26
Implement common MPAS grid for ELM, MOSART, and MPASO	2. Implement and test unified mesh for ELM-MOSART-Ocean	1/26	12/26
Implement lateral transport across and within ELM gridcells	3. Implement and test subgrid lateral water flows	1/26	12/26
Implement and test new crops in ELM	4. Prognostic crop improvements	1/26	12/26
Identify, understand, and reduce important model biases	5. Evaluate land-atm coupling with focus on S2S2D timescales	1/26	12/26
Identify, understand, and reduce important model biases	6. Develop surrogate models and apply for uncertainty quantification and model calibration	1/26	12/26
Improve prognostic vegetation	7. ELM-FATES grid-level biogeography implementation and testing	1/26	12/26
Improve land inputs and workflows	8. Synthesize high-resolution input datasets and improve tools for creating surface datasets	1/26	12/26
Modernize land code base	9. Prepare ELM for C++ migration	5/26	12/26
Employ AI methods to accelerate land model	10. Develop and implement AI approach for model spinup	1/26	9/26
Infrastructure	11. Land code integration	1/26	12/26