

SUSTAIN

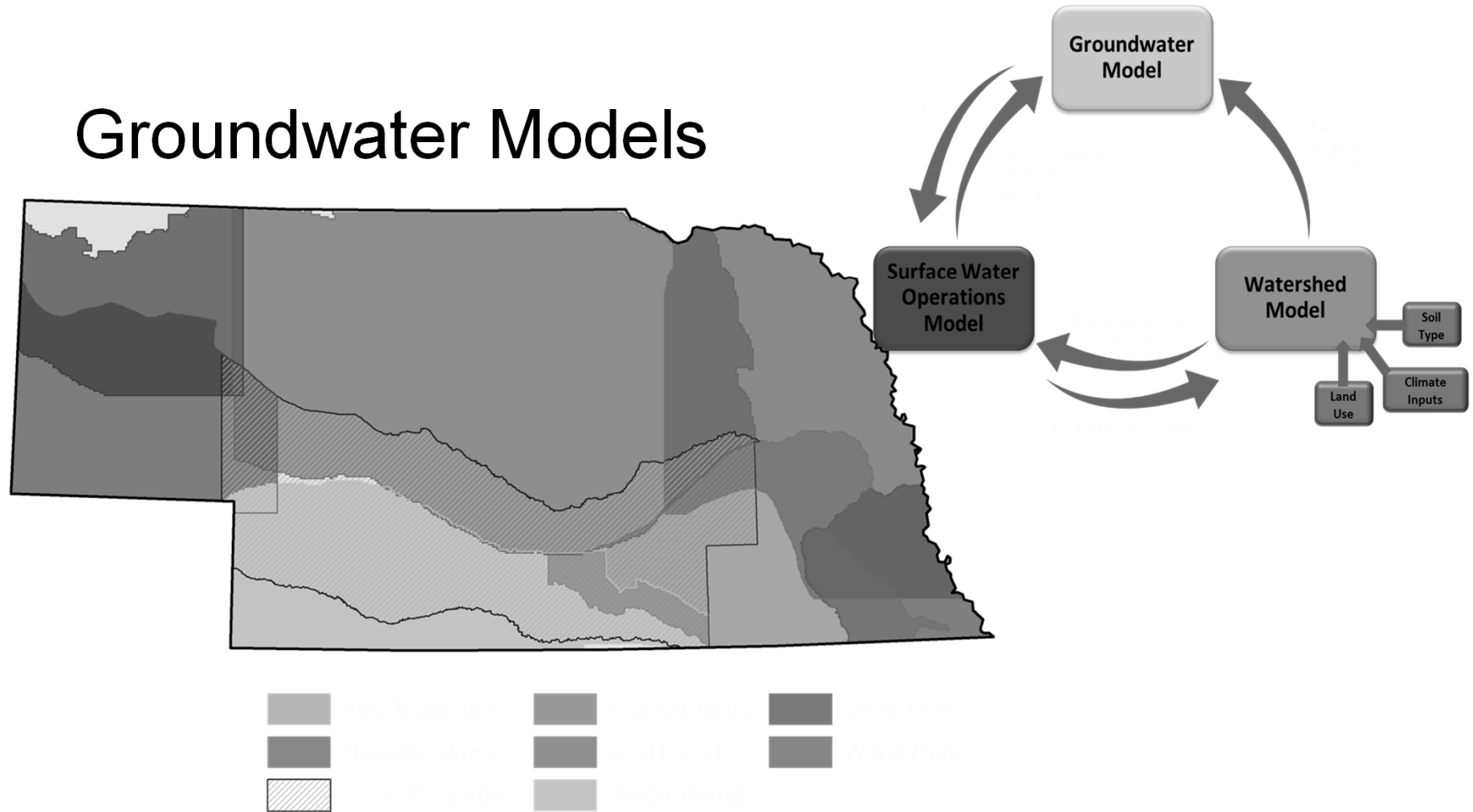
NeDNR's New Modeling Application

NEBRASKA

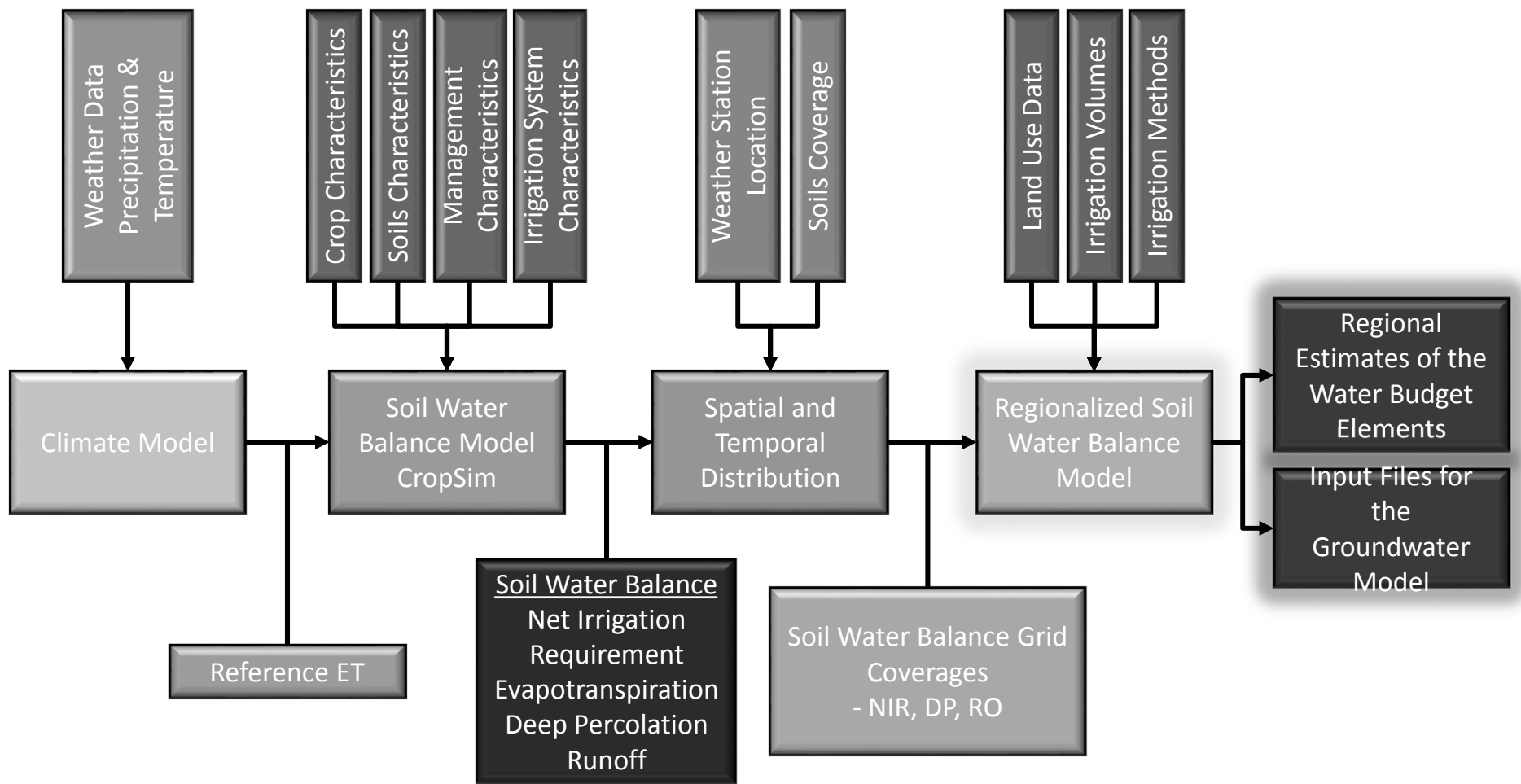
Jesse Bradley, Assistant Director

Margeaux Carter, Integrated Management Specialist

Groundwater Models

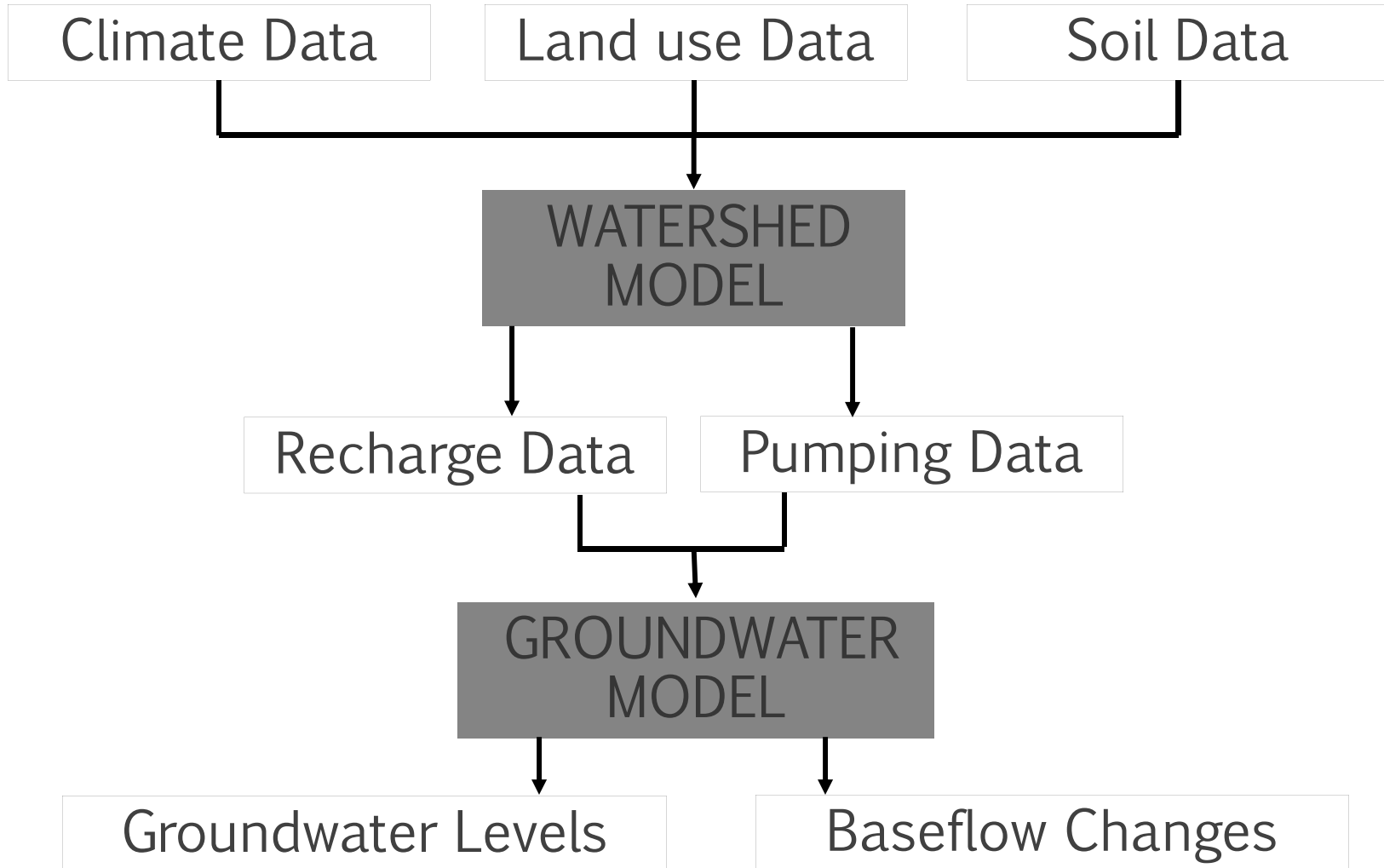


- Goal has been to have statewide groundwater modeling tools... we're almost there



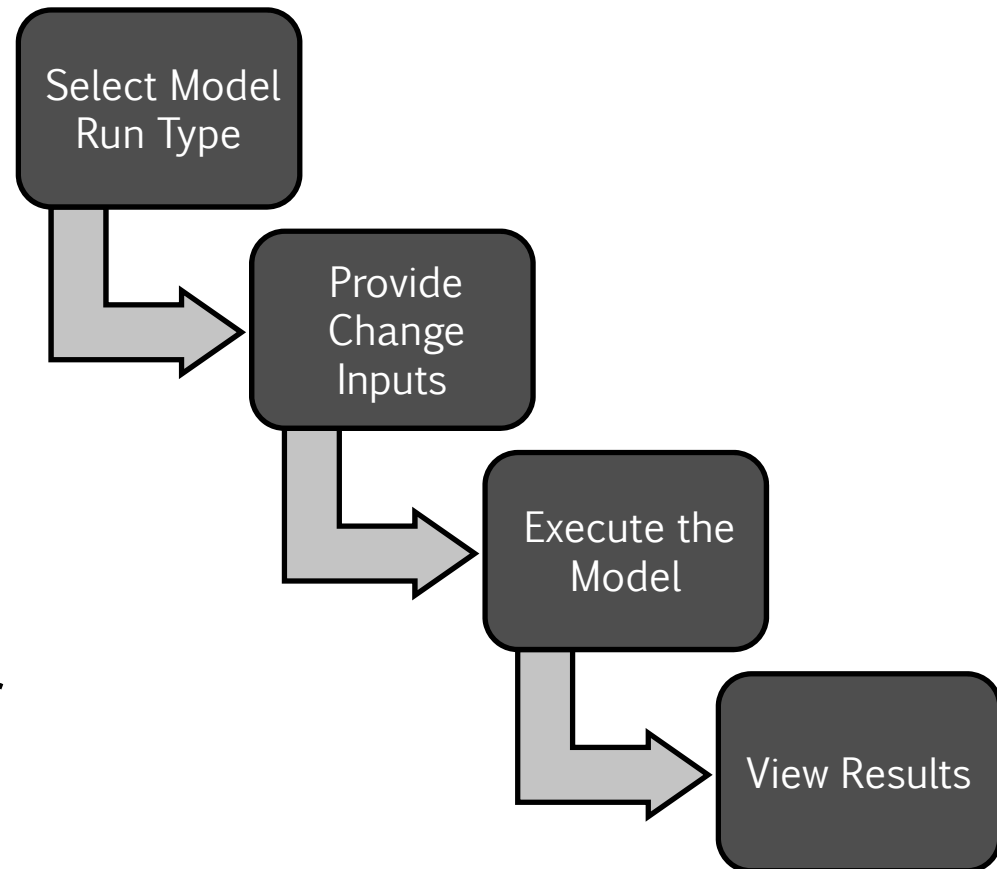
SUSTAIN

(Sustainable Use Scenario Tool for Analysis and Informing Nebraskans)



SUSTAIN Utilizes Existing Groundwater Models

- Improve access to watershed model results (land use, pumping, recharge)
- GUI for model analysis (recharge and pumping changes)
- View results at the county, NRD, or user defined level





SUSTAIN

Live Demo...



Summary


- Management Questions that can be Evaluated with SUSTAIN:
 - Water budget questions:
 - How many irrigated acres are in an area?
 - How much pumping occurs in an area?
 - Is the pumping in an area more or less than the recharge?
 - How do baseflows and water levels change as a result of increases or decreases in recharge?
 - Canal recharge projects
 - Conjunctive management activities
 - How do baseflows and water levels change due to increases or decreases in pumping?
 - Allocations
 - New wells
 - Retirements

Summary

NeDNR Plans for Moving Forward:

- Finalize application
- Document methods and create tutorials for users
- Incorporate additional models
 - Northern Missouri-Tribs Model
 - CeNEB Model
 - COHYST Model
 - Blue Basins Model

Input from potential users is welcome!



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