

SUSTAIN

NeDNR's New Modeling Application

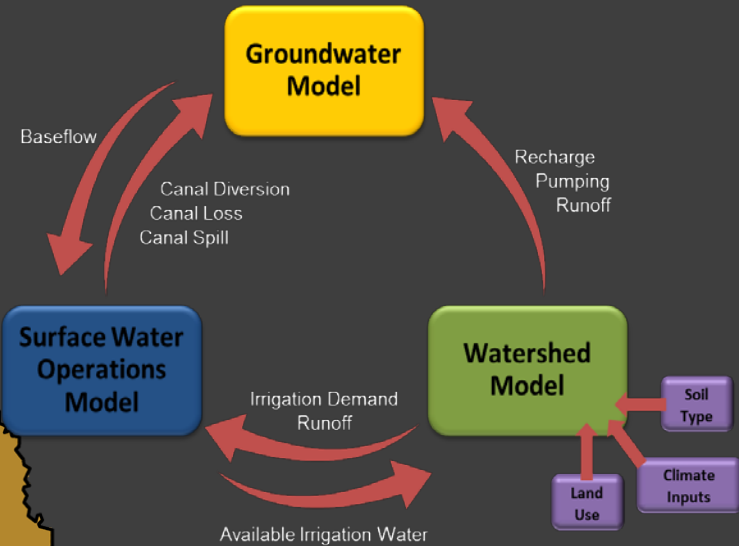
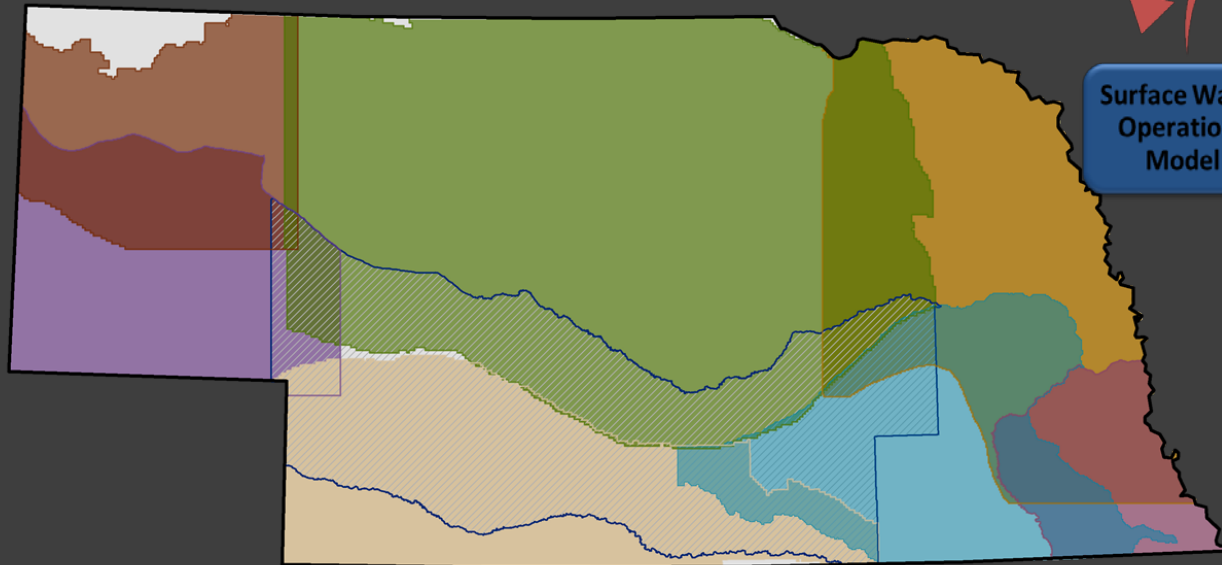
Jesse Bradley, Assistant Director
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NEBRASKA

Good Life. Great Water.

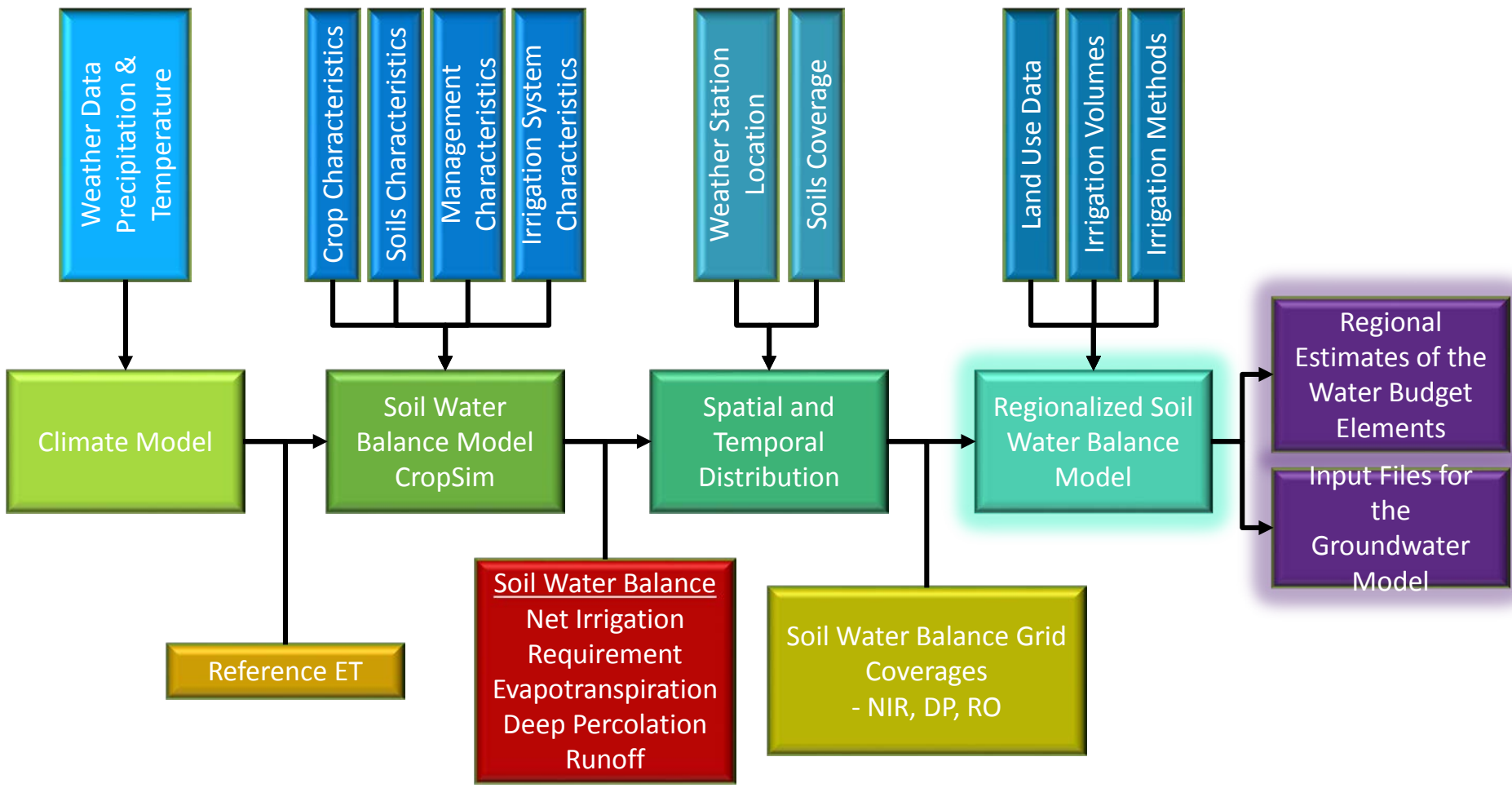
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Groundwater Models



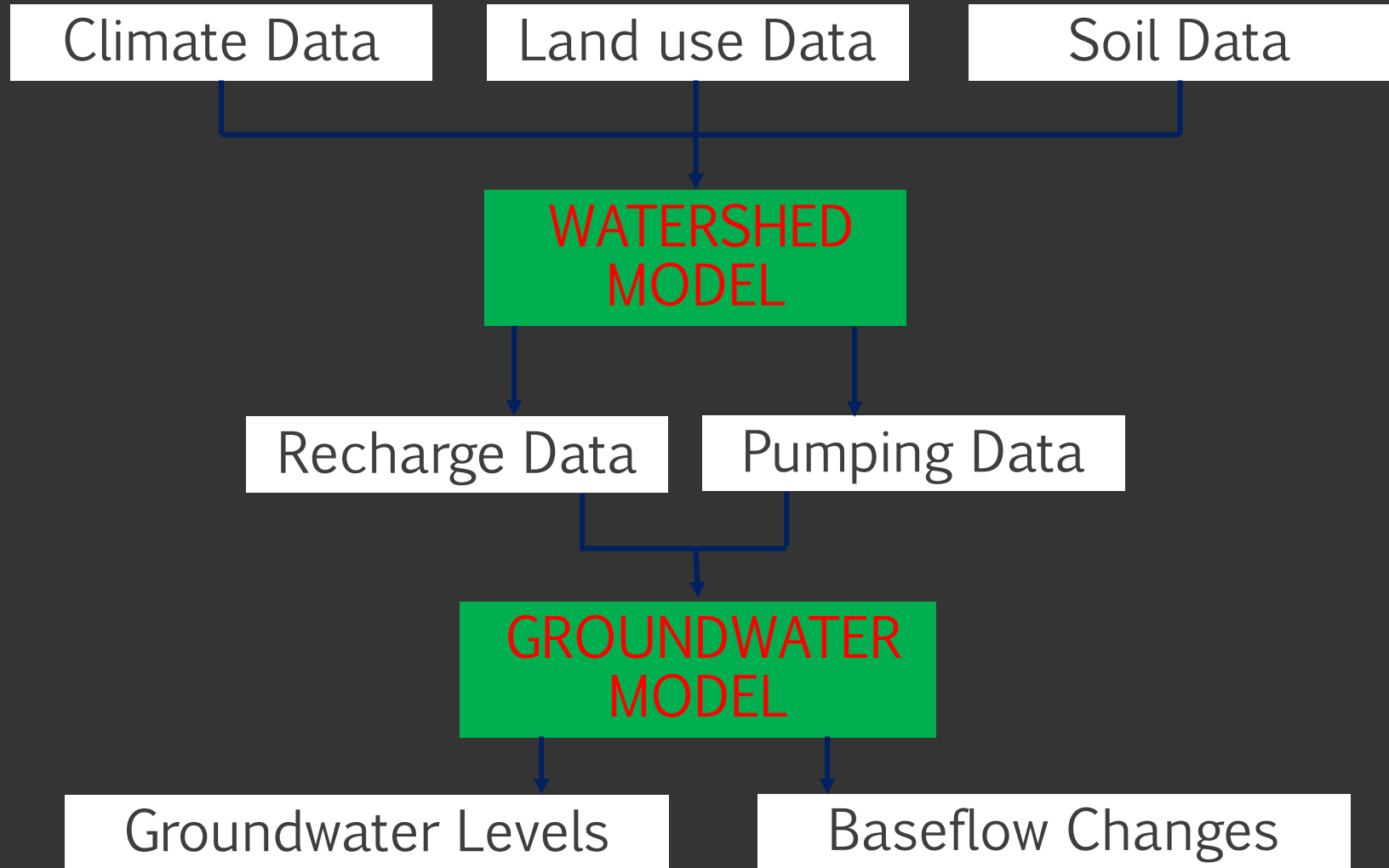
- | | | |
|---|--|---|
|  Blue Basin Model |  CENEB Model |  UNW Model |
|  Nemaha Model |  LPMT Model |  WWU Model |
|  COHYST Model |  RRCA Model | |

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



SUSTAIN

(Sustainable Use Scenario Tool for Analysis and Informing Nebraskans)

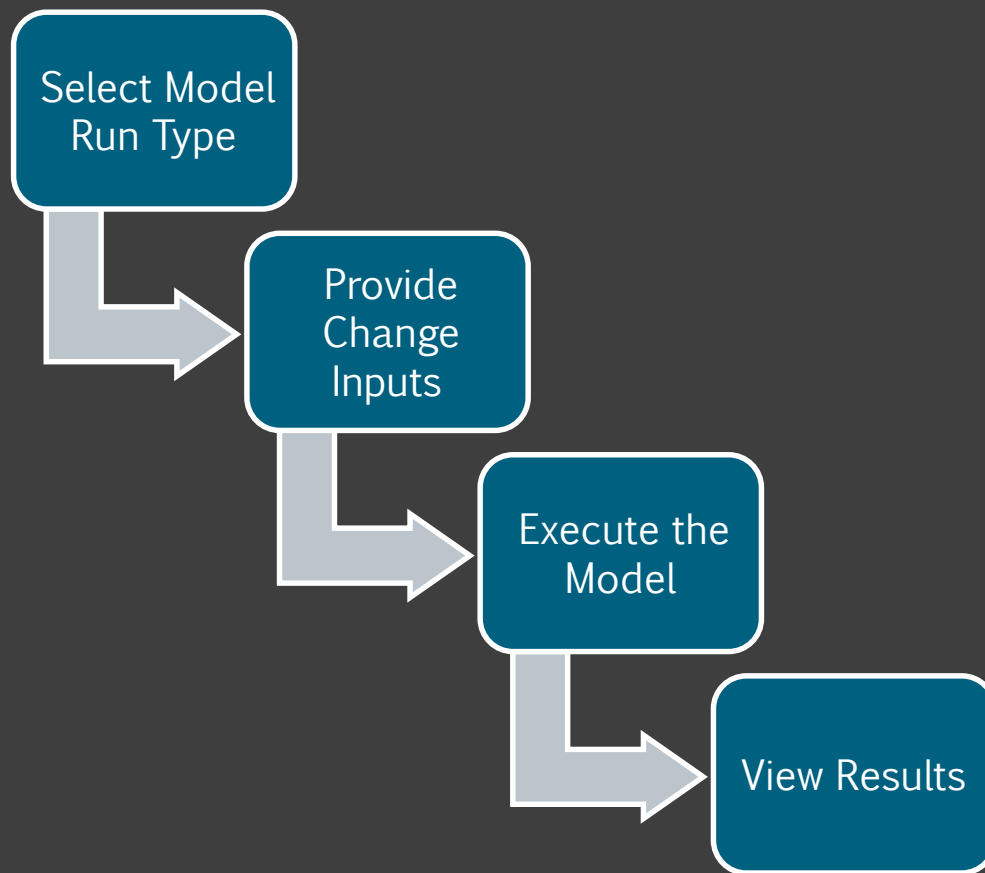


SUSTAIN Utilizes Existing Groundwater Models

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!

NEBRASKA

A yellow swoosh graphic that starts under the 'N', goes under the 'B', 'R', 'A', 'S', and ends under the 'K', 'A'.

Good Life. Great Water.

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