



Adaptive Management Plan Update Overview

Water Advisory Committee

February 5th, 2019

Upcoming questions:

Evaluate target flows & Hydrologic conditions?

Can we meet species objectives with 120,000 AF?

How do we best manage our water?



Species Objectives:

Improve production of least tern and piping plover from the central Platte River Valley

Contribute to survival of whooping cranes during migration

Avoid adverse impact from Program actions on pallid sturgeon populations

Within overall objectives 1–3, provide benefits to non-target listed species and non-listed species of concern and reduce likelihood of future listing



AMP Update and target flows:

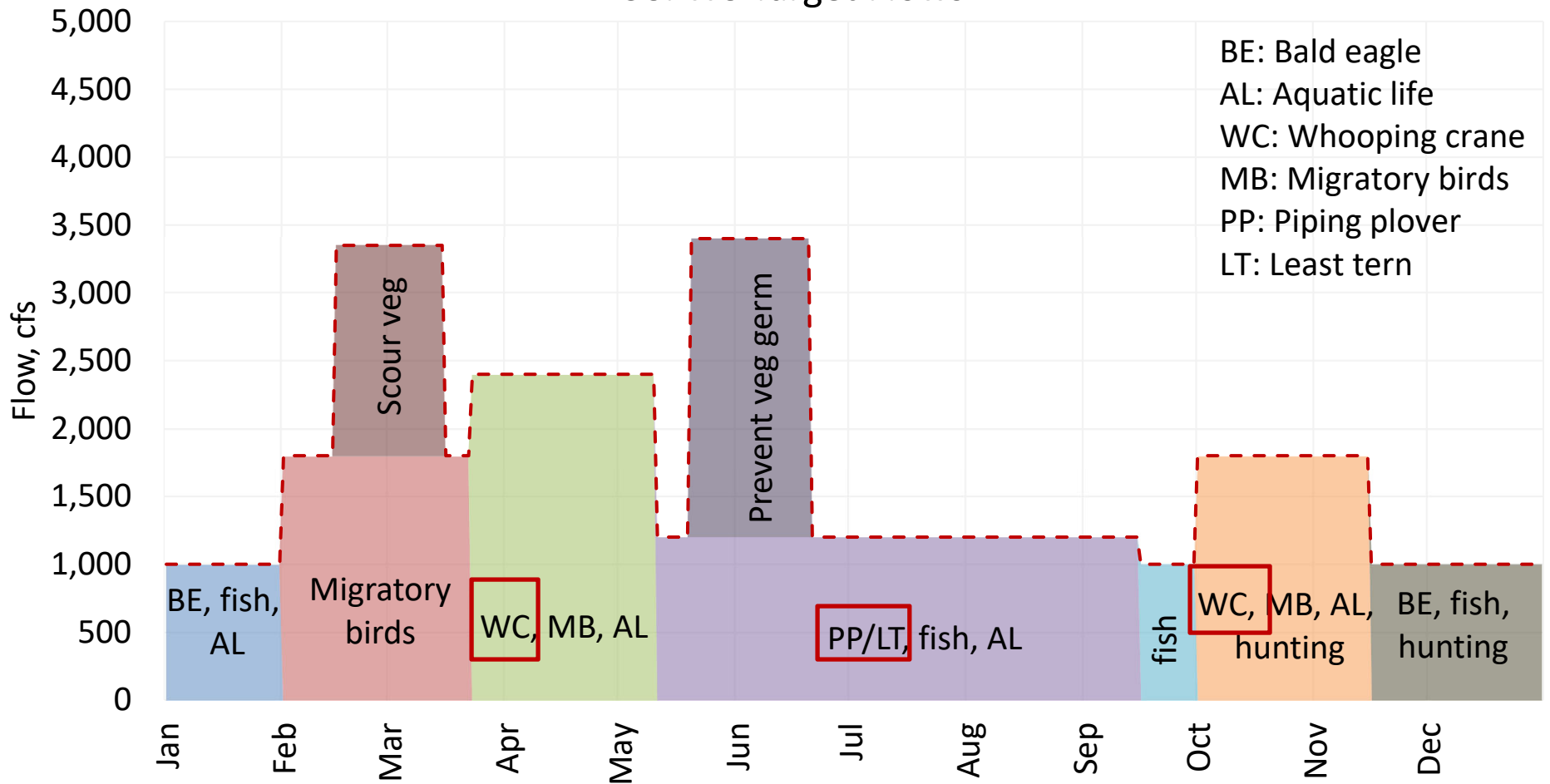
Limited-scope approach

-or-

Broader-scope approach



USFWS Target Flows



Species flow: Jan

Species flow: mid-Mar to mid-May

Species flow: mid-Sep

Species flow: mid-Nov to Dec

Pulse flow: late spring pulse

Species flow: Feb to mid-Mar

Species flow: mid-May to mid-Sept

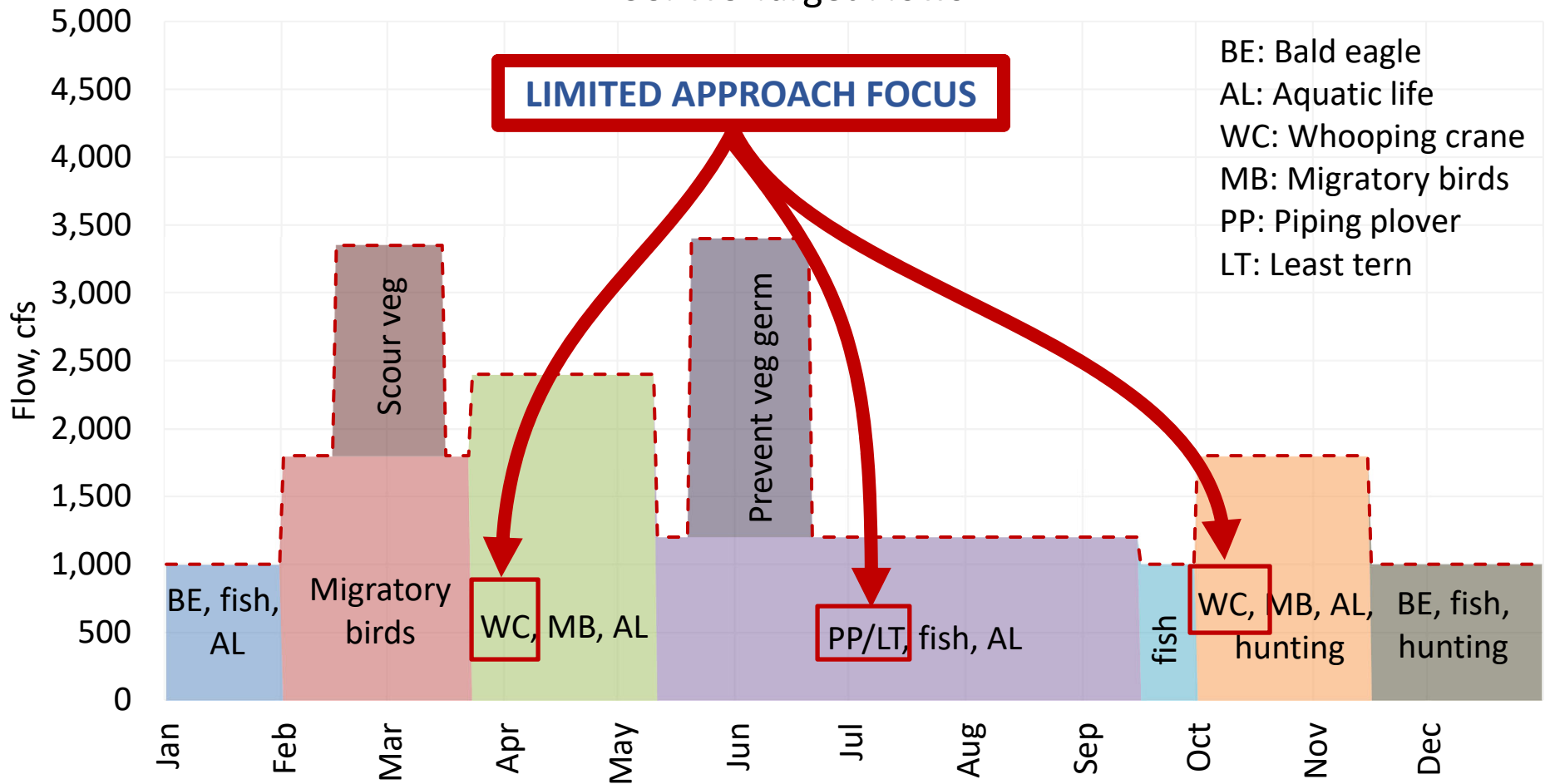
Species flow: Oct to mid-Nov

Pulse flow: early spring pulse

--- Normal target flow



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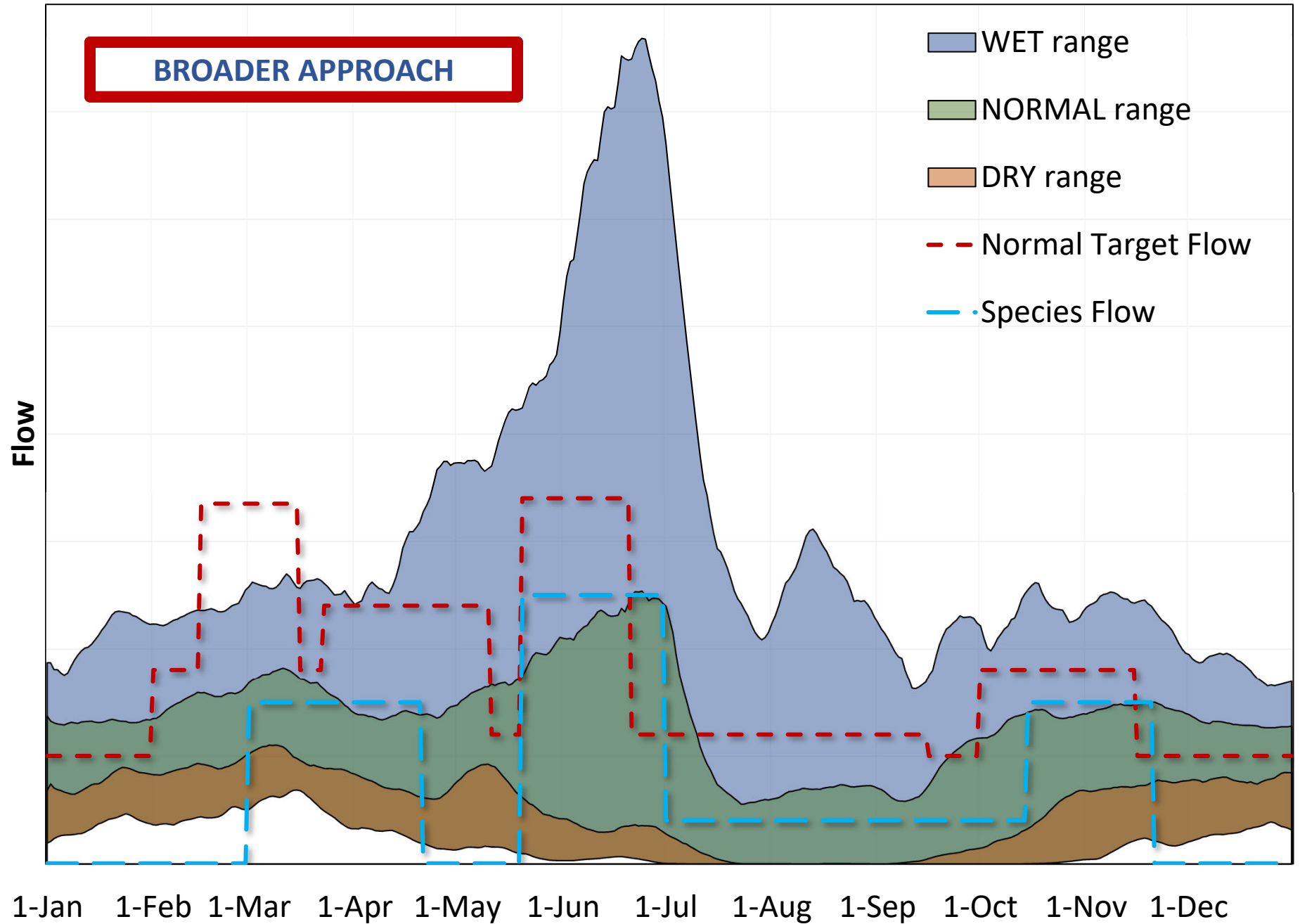
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Example of Environmental and Species Flows

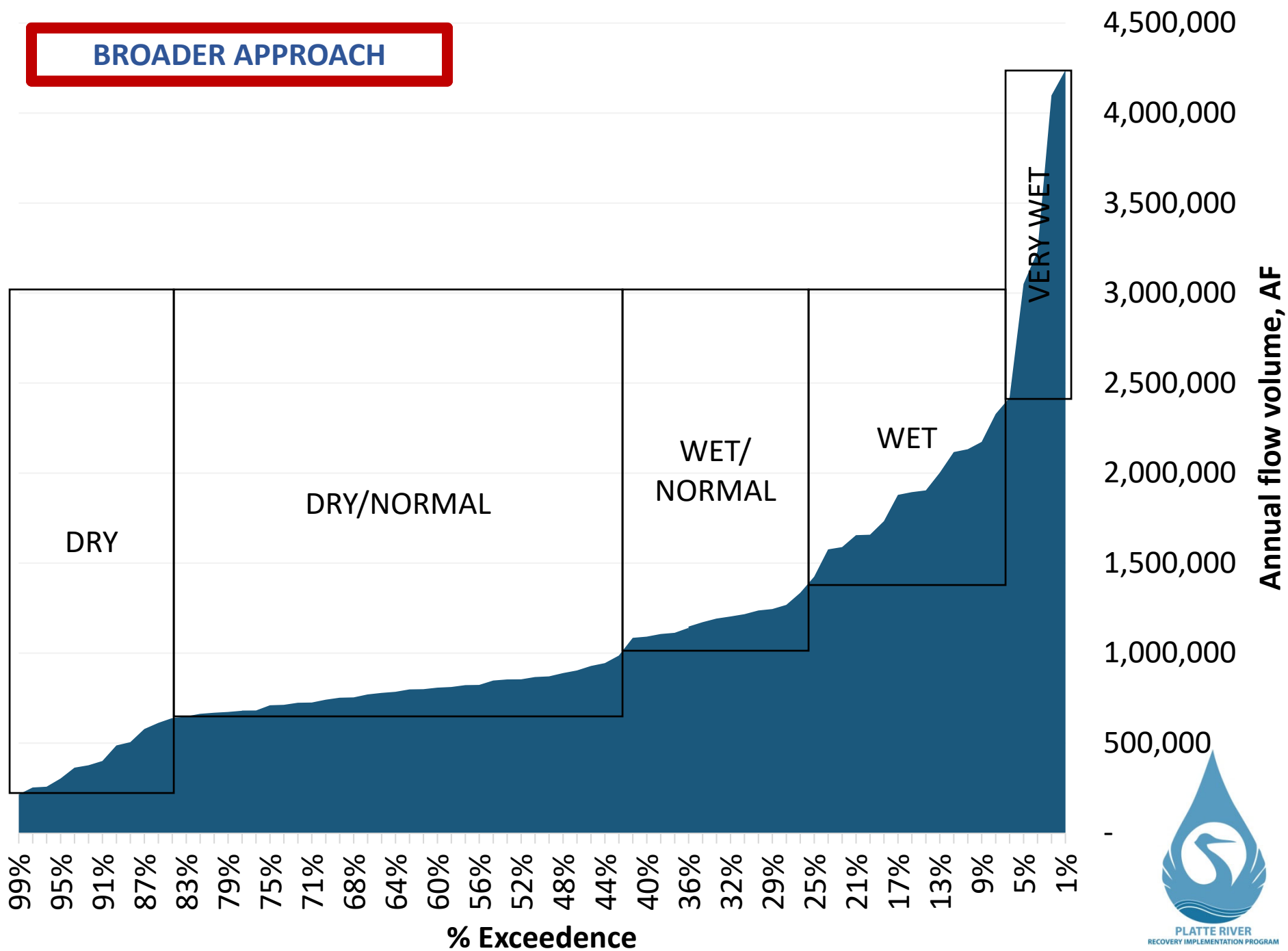


LIMITED APPROACH



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

BROADER APPROACH



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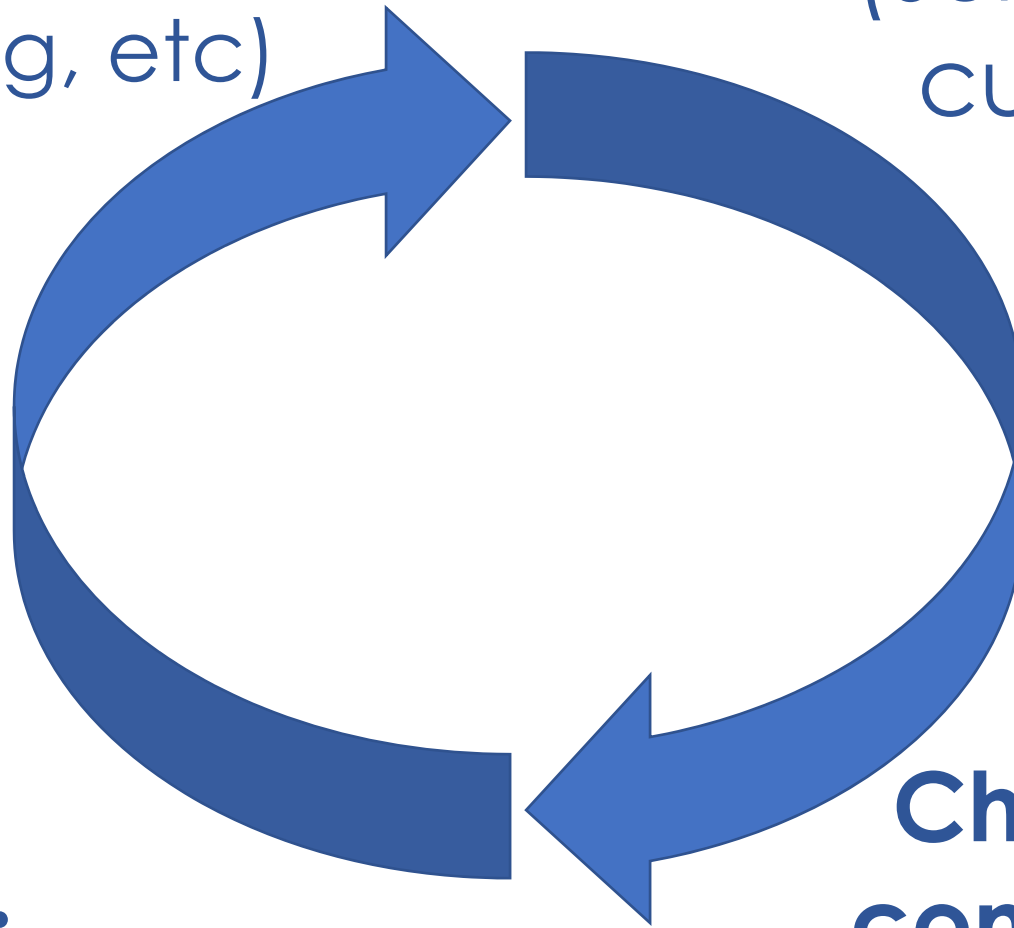


Available water
(EA water
accounting, etc)

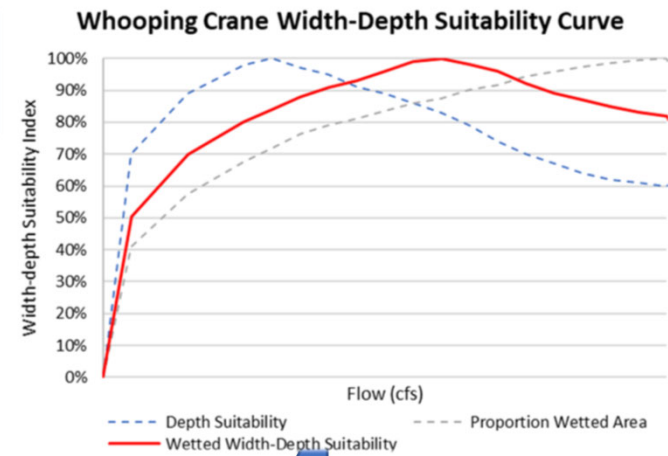
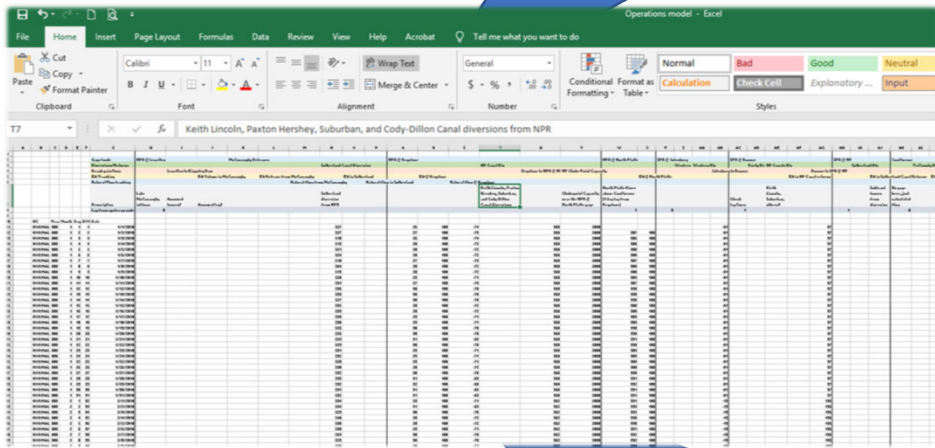
Species needs
(Suitability
curves)

Flow routing
(operations
model)

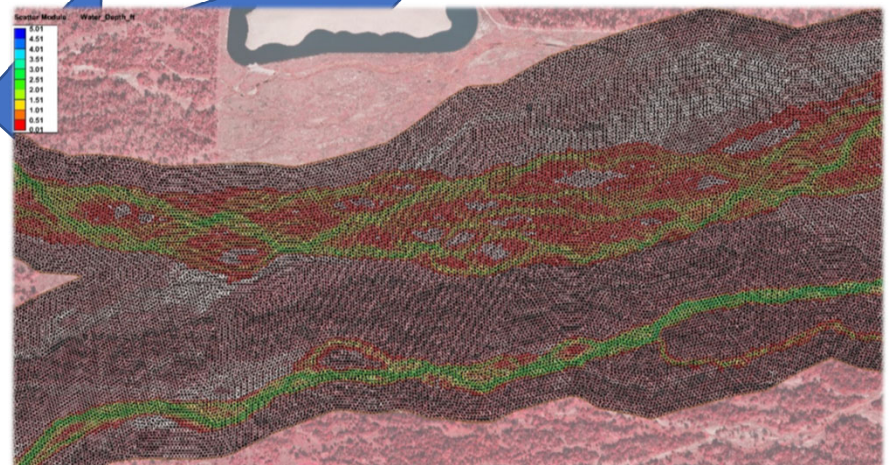
**Channel
conditions**
(2D hydraulic
model)



Can we meet our species objectives with 120,000 AF?



How do we best manage our water?



Assigned Reading:

- *Adaptive Management on the central Platte River—Science, engineering, and decision analysis to assist in the recovery of four species.* Smith, 2010
- *Instream Flow Recommendations for the Central Platte River, Nebraska.* Bowman, 1994 (Skim)
- *Characterization of Hydrologic Conditions to Support Platte River Species Recovery Efforts.* Andersen & Rodney, 2006

