Non-Corps of Engineers survey efforts

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Many states have non-Corps efforts

Montana – Yellowstone River, Fort Peck Reservoir

Nebraska – Platte, Niobrara, Loup Rivers and at gravel mines ("sand pits")

Iowa – fly ash deposits at power plants near the Missouri River

Kansas – Kansas River, Quivera NWR (Cimerron River), city of Wichita(!)

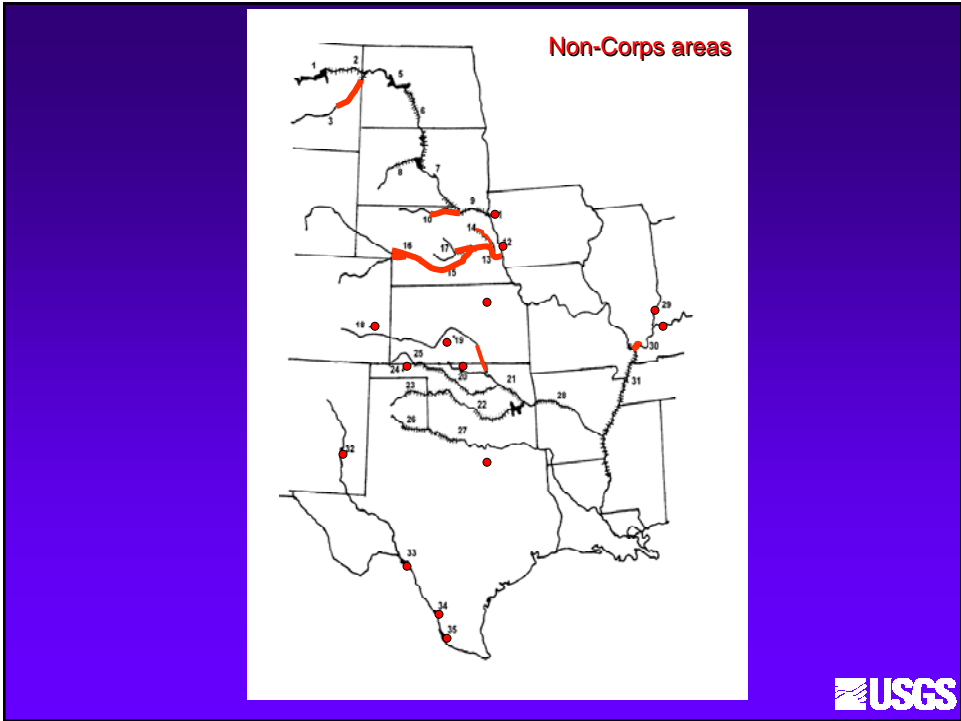Oklahoma – Salt Plains and (Optima) NWRs, Canadian River

Texas – Rio Grande reservoirs, various habitats in Trinity River drainage

Indiana – fly ash deposits at power plants

New Mexico – Bitter Lake NWR

Colorado – Arkansas River basin reservoirs

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Non-Corps areas

Who's doing the work?
State biologists or contract biologists (Nebraska, Texas, Colorado, Indiana, Montana)

University (Kansas, Montana, Nebraska)

NGO (Texas)

Volunteers (Iowa)

Commercial interests (Nebraska)

USFWS (Oklahoma, Nebraska)

NPS (Nebraska)

BLM (Montana)

Monitoring Issues of concern to these efforts:

#1 - Budget constraints

Coordination of efforts and methods
Accessibility
Concerns about disturbance
Habitat differences affecting counts

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What's being monitored?

Numbers and distribution primarily

In some places measures of productivity

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How are numbers and distribution being monitored?

Boat or foot/vehicle access, view without disturbing
   -distances vary
   -timing in relation to nesting can vary

Boat or foot access, going into colonies and counting nests after viewing
   -typically for productivity monitoring

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Assumptions about estimate reliability probably differs
   by river system and habitat
   by surveying entity

Calibration????

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What else should be monitored?

Habitat conditions

Disturbance and predation

before

during

Habitat conditions
> hydrology
> condition of nesting habitat
>> vegetation
>> substrate
> protection
>> isolation (predation)
>> elevation (flooding)

Reporting consistency varies or its not recorded at all.

Management?

Signs and visual barriers to prevent human disturbance

Outreach and education

Electrical fencing

Nest fencing

Law Enforcement

….. all are focused on management of birds on sites and direct human interactions

Habitat Management

Island building

Vegetation clearing

Dredge deposition

Nesting deterrents and attractants

….Do not address foraging habitat and sustainable nesting habitat

Habitat Management Issues

Common threads – altered hydrology
                      vegetation encroachment

Challenges for monitoring wide variety of habitats
        monitoring birds –
                $$$, habitat differences, accessibility,
                reliability of counts esp. productivity
        monitoring habitats-
                $$$, different definitions of suitable
                Foraging habitat and forage base??

Summary

Significant effort and involvement that is not Corps

Significant range coverage but effort varies
        depending on budgets

Comparability of counts?
        Effort, coverage, timing, methods and
        definitions, training, habitat

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