



# SOUTH DAKOTA GAME, FISH and PARKS



# Missouri River Waterfowl Refuge Review



# Missouri River Refuge Review

- Guidance from the Department's Strategic Plan under *Strategy 1.*, Simplify and increase recreational opportunities by 2020.
  - Examples include: removing regulatory burdens, increasing the number of acres open to public hunting and fishing and applying consistency to current rules and regulations.
- The sustainability of our hunting and fishing heritage relies on future participation. We must focus on recruiting the next generation!
- Process:
  - Back in March 2018, a petition was received by the Commission to remove/modify a waterfowl refuge on the Missouri River
    - The Commission asked the Department to form a work group and review all waterfowl refuges on the Missouri River System
    - 12 member internal work group was formed
      - Numerous meetings were held from August – Current, to discuss available data, and formulate draft criteria
      - Internal email was sent to all Department Staff the end of November that did include **draft** recommendations for each refuge based on the **draft** criteria document
      - A public meeting was held in Pierre on December 4<sup>th</sup> to review the draft criteria



# Missouri River Refuge Review

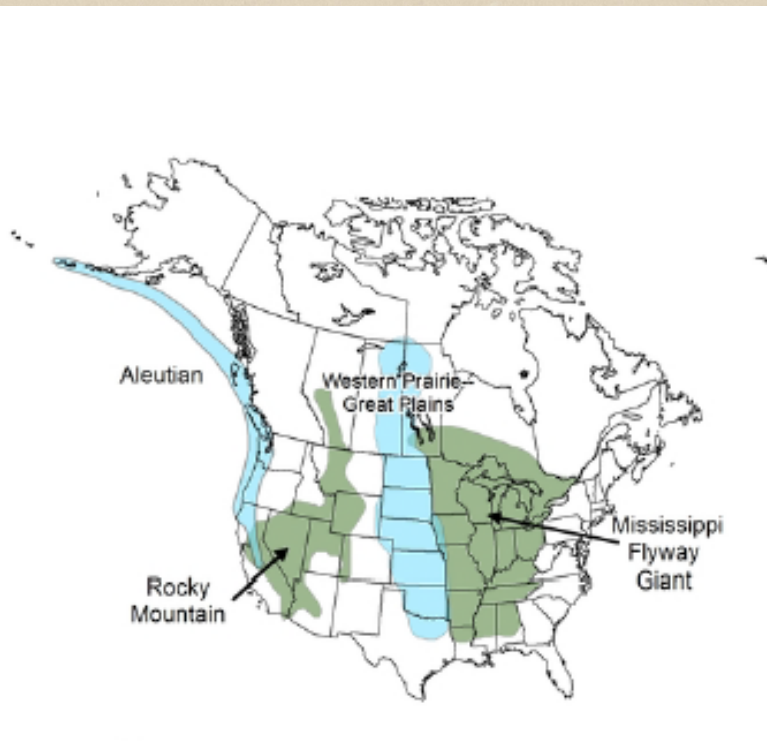
- Review survey data and hunter trends.
  - Provide data on shifts in migratory patterns, hunter participation, and waterfowl populations.
- Review the history and status of refuges on the Missouri River.
  - How are/were refuges created?
  - What are the differences in refuges?
- Review Draft Criteria.

# Canada Goose Populations



In South Dakota we have Western Prairie/Great Plains large, temperate breeding Canada geese and arctic breeding Central Flyway Arctic Nesting Canada Geese (CFAN) that migrate down the Missouri River each fall

Temperate breeding Canada goose populations have been increasing across the continent.



# Large Canada Goose Breeding Populations



- Breeding indices for WP/GP Canada geese increasing for by 4% a year since 2008 overall.
- Similar trends for temperate breeding Canada geese across the Continent.

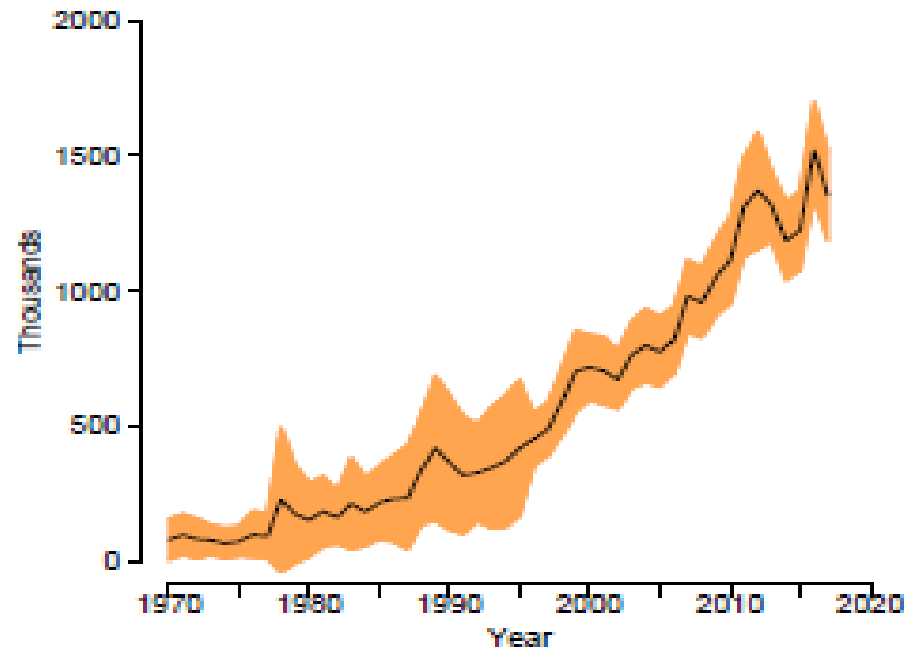
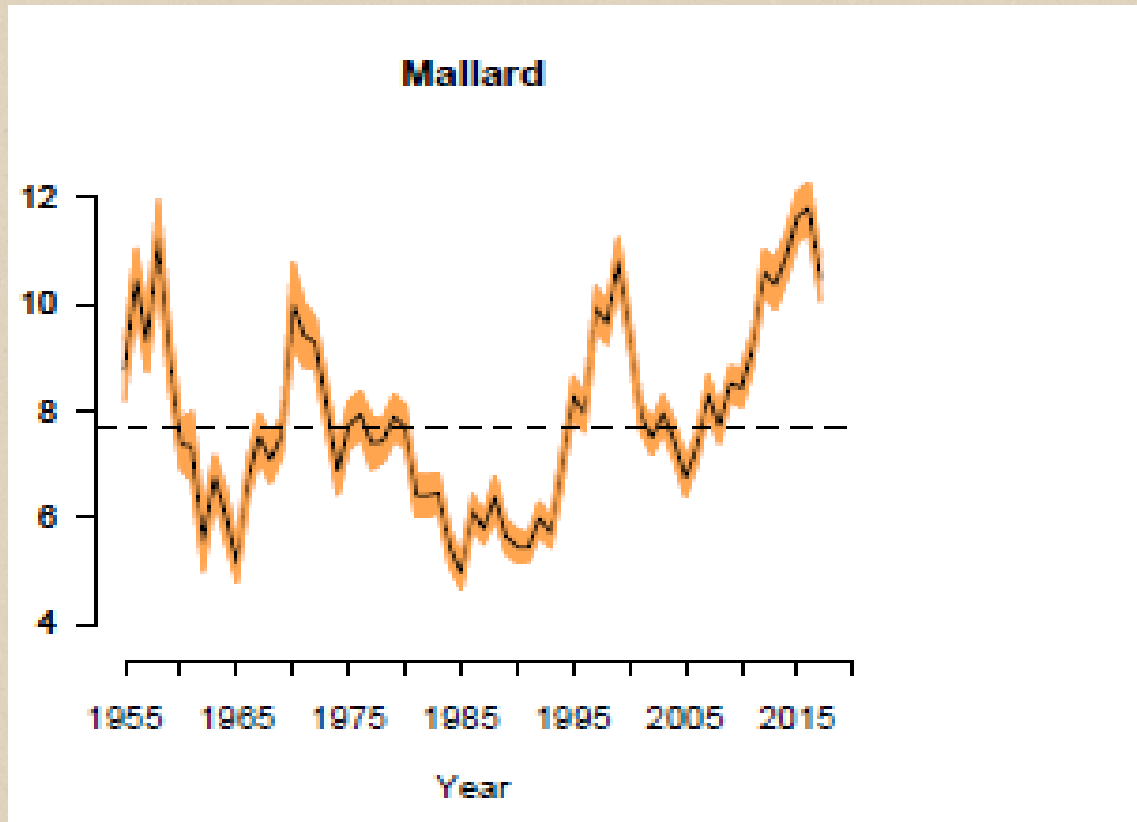


Figure 13. Estimated numbers (and 95% confidence intervals) of **Western Prairie/Great Plains Population** Canada geese (spring index).

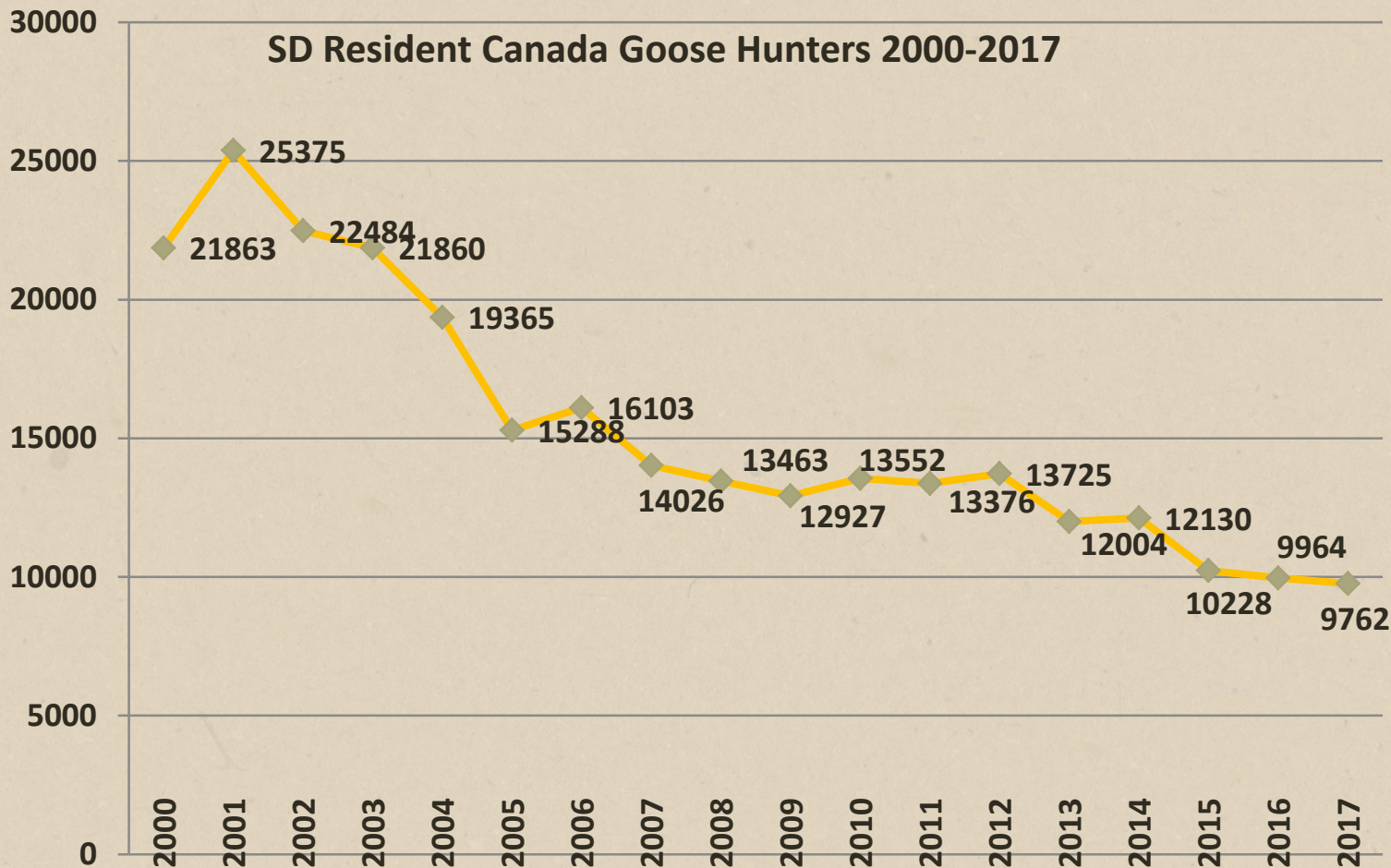
# Mallard Breeding Population



# South Dakota Resident Goose Hunter Number Trends

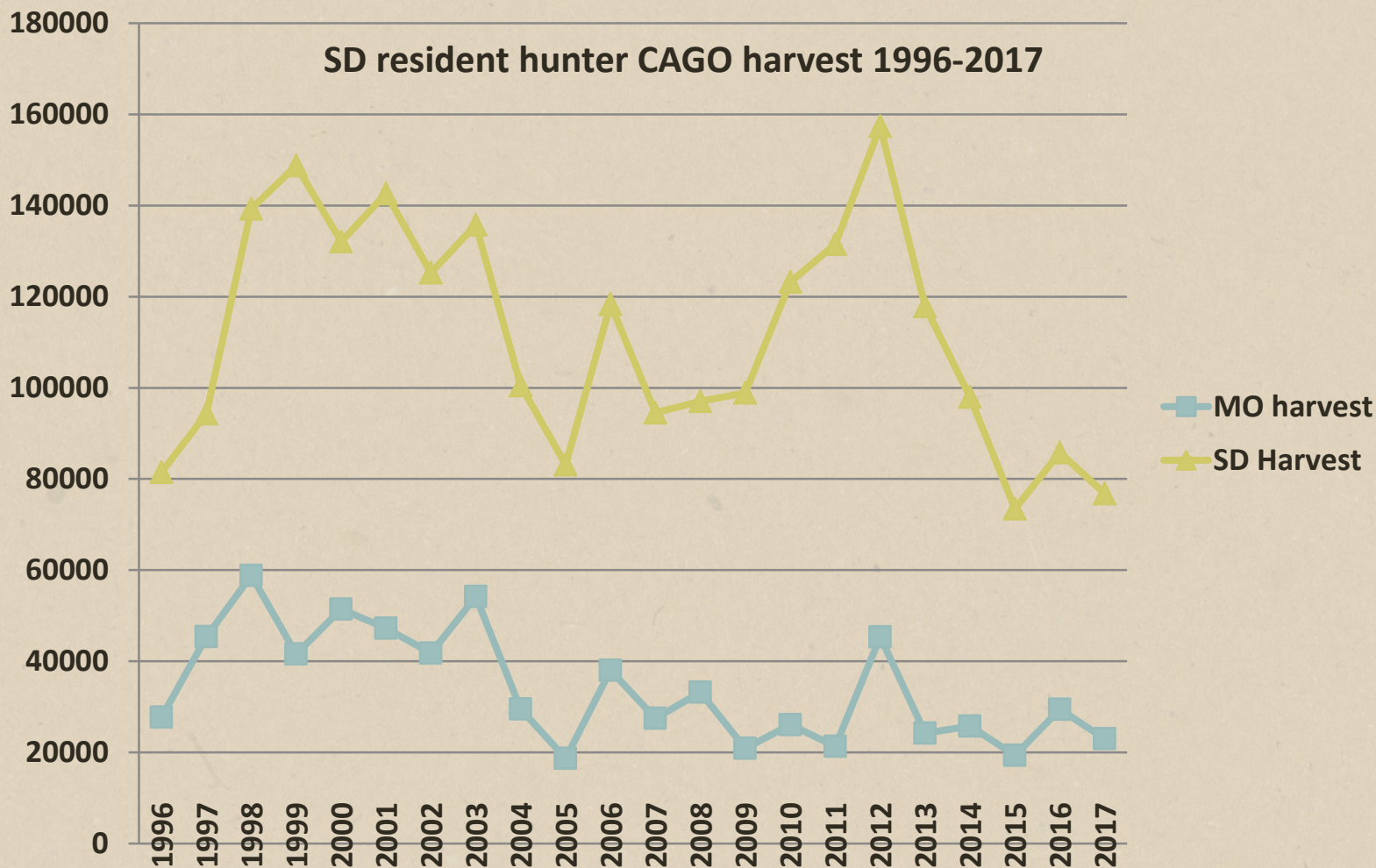


- 60% decline since 2001
- Duck hunters show a similar trend





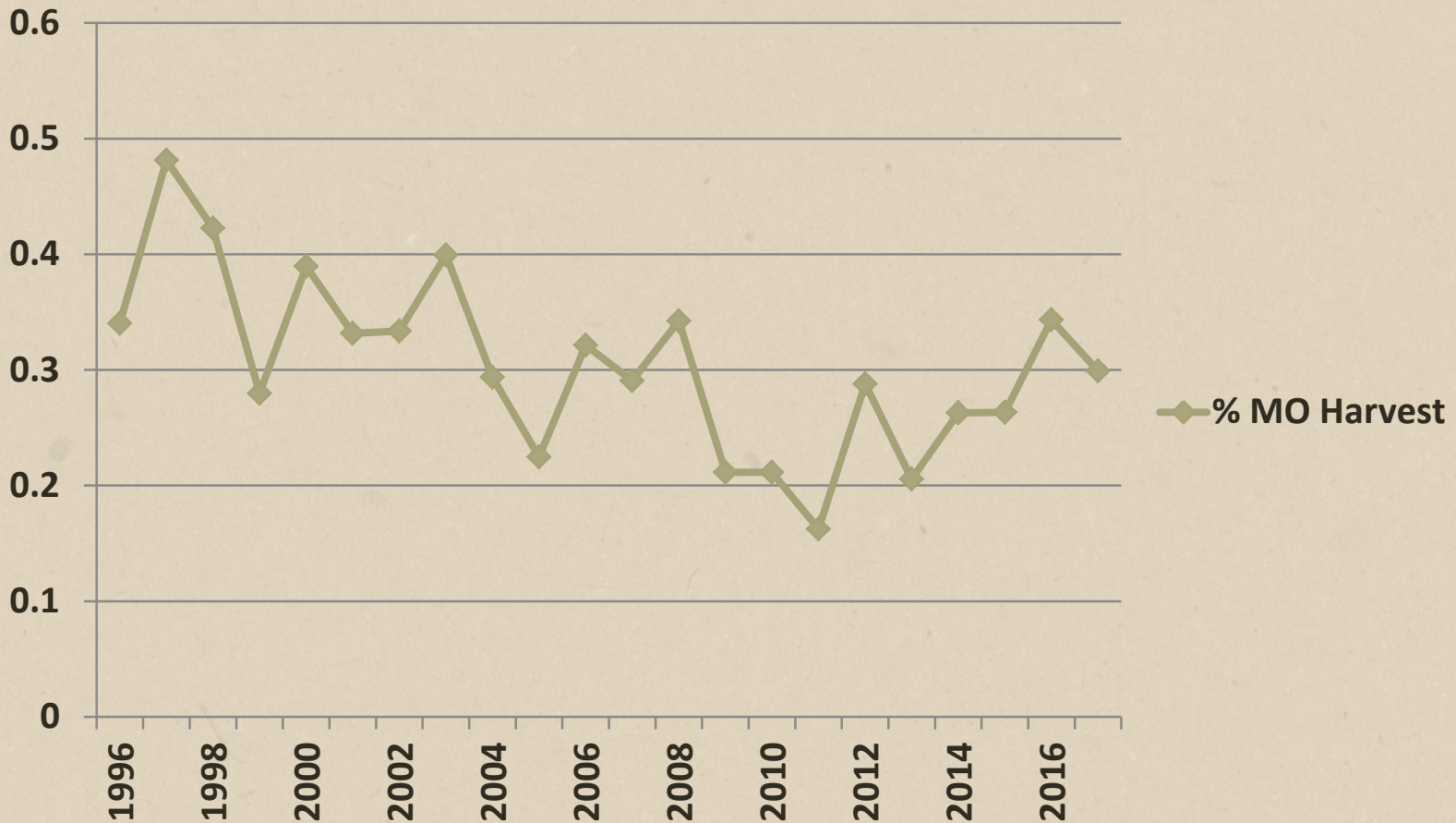
# Missouri River Goose Harvest



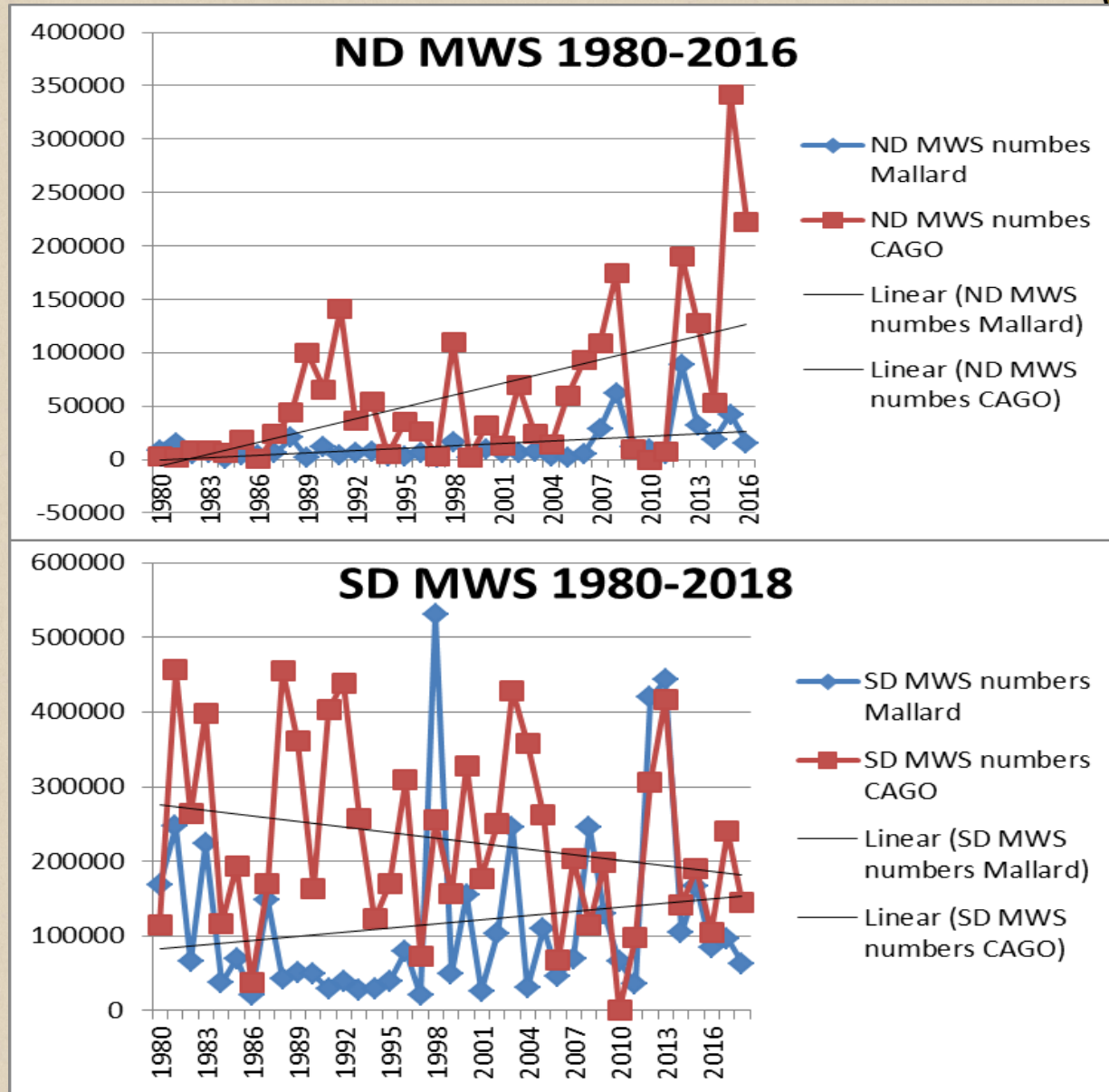
# Percentage Missouri River Harvest 1996-2017



Missouri River Harvest as a Percentage of Total Harvest



# Mid-Winter Survey Trends



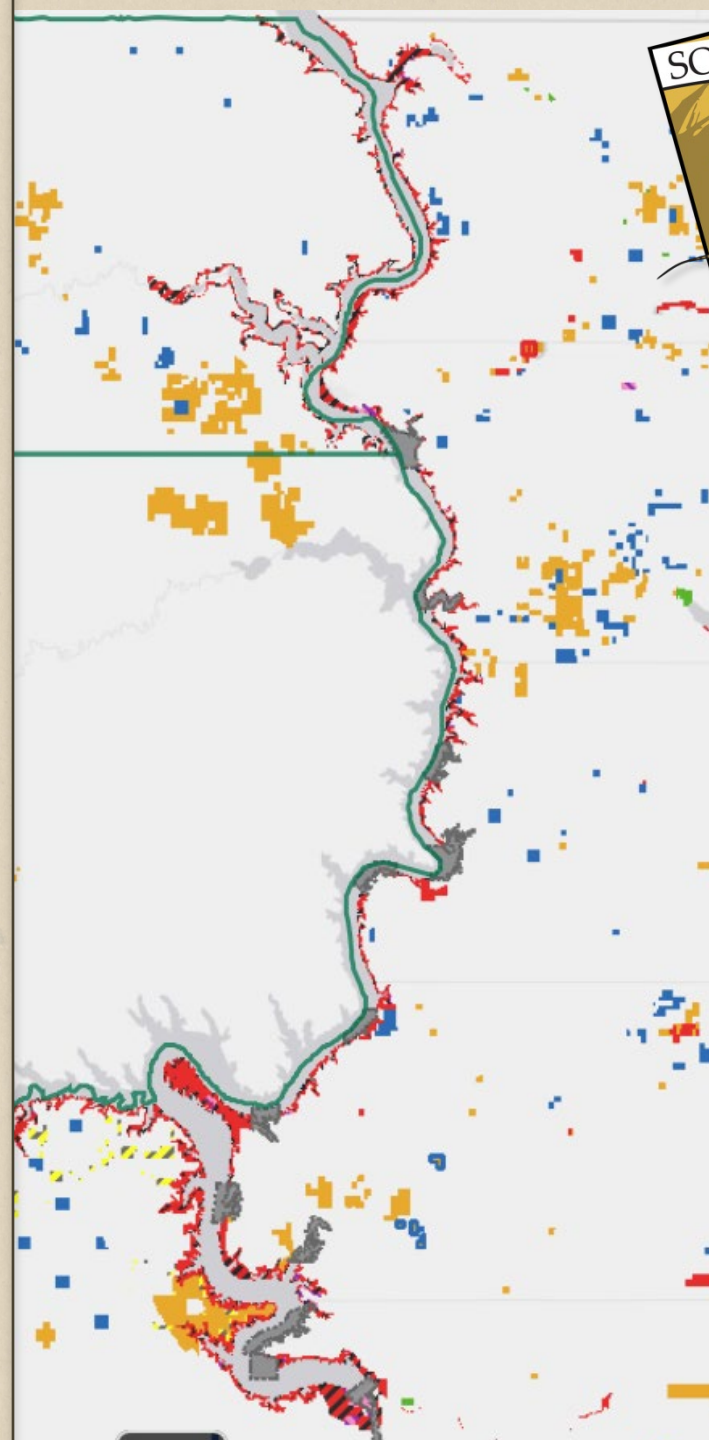


# Refuge Review

- SDCL 41-2-18(6) gives the Commission authority to adopt rules to create, modify, or vacate state refuges.  
[https://sdlegislature.gov/Statutes/Codified\\_Laws/DisplayStatute.aspx?Type=Statute&Statute=41-2-18](https://sdlegislature.gov/Statutes/Codified_Laws/DisplayStatute.aspx?Type=Statute&Statute=41-2-18)
- Currently there are 21 refuges on the Missouri River system listed in ARSD 41:05:02:68.  
<https://sdlegislature.gov/Rules/DisplayRule.aspx?Rule=41:05:02:68>
- 14 are open to duck hunting after the Canada goose season closes.
- 7 are closed to all waterfowl hunting during all waterfowl seasons.
- 11% of Missouri River in SD in Refuge status
- History.

# Lake Oahe

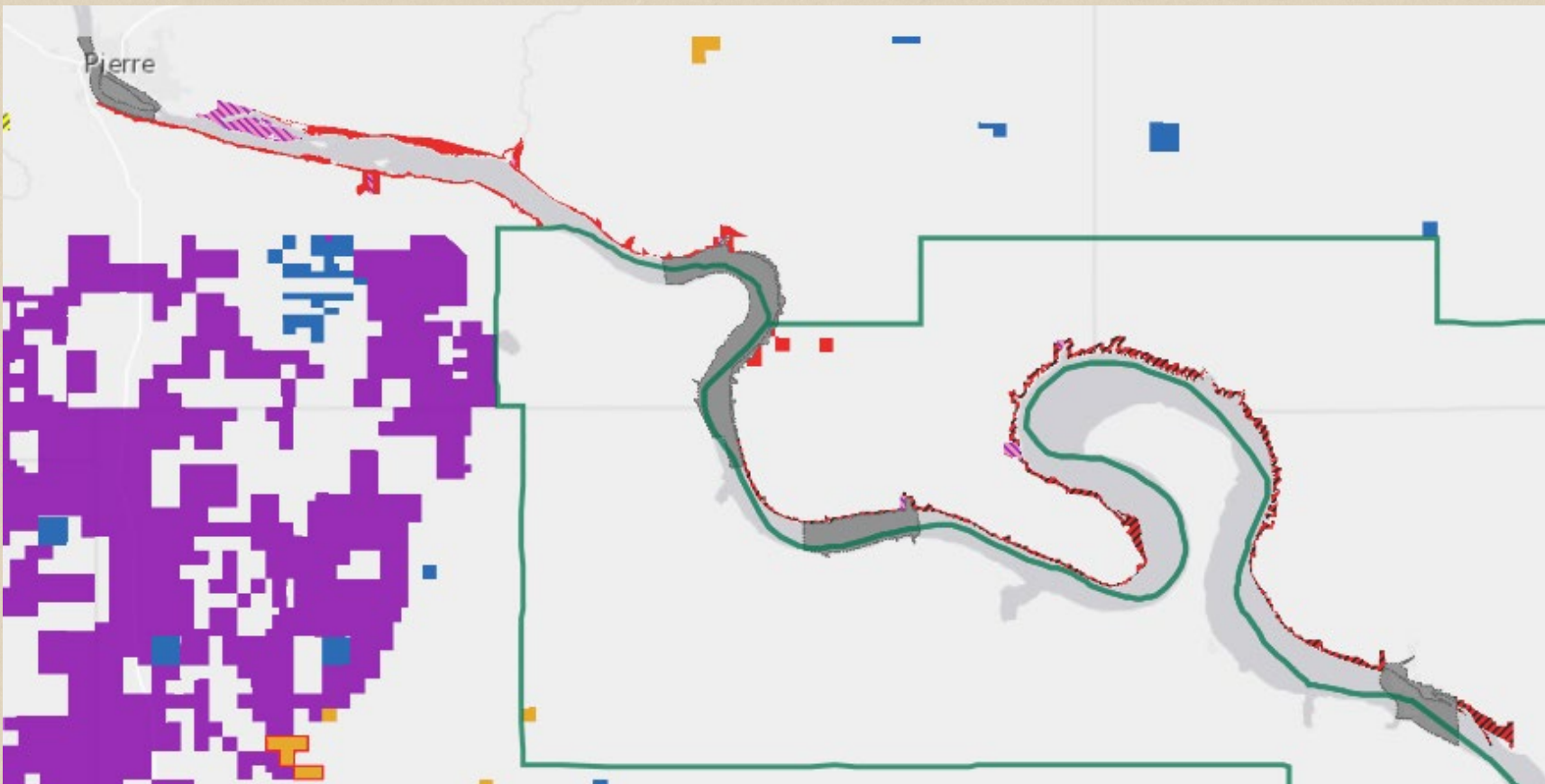
- 12 Refuges
- 231 river miles (Oahe dam to Bismark); 160 miles within SD
- 2 tribal reservations
  - Standing Rock Sioux Tribe
  - Cheyenne River Sioux Tribe





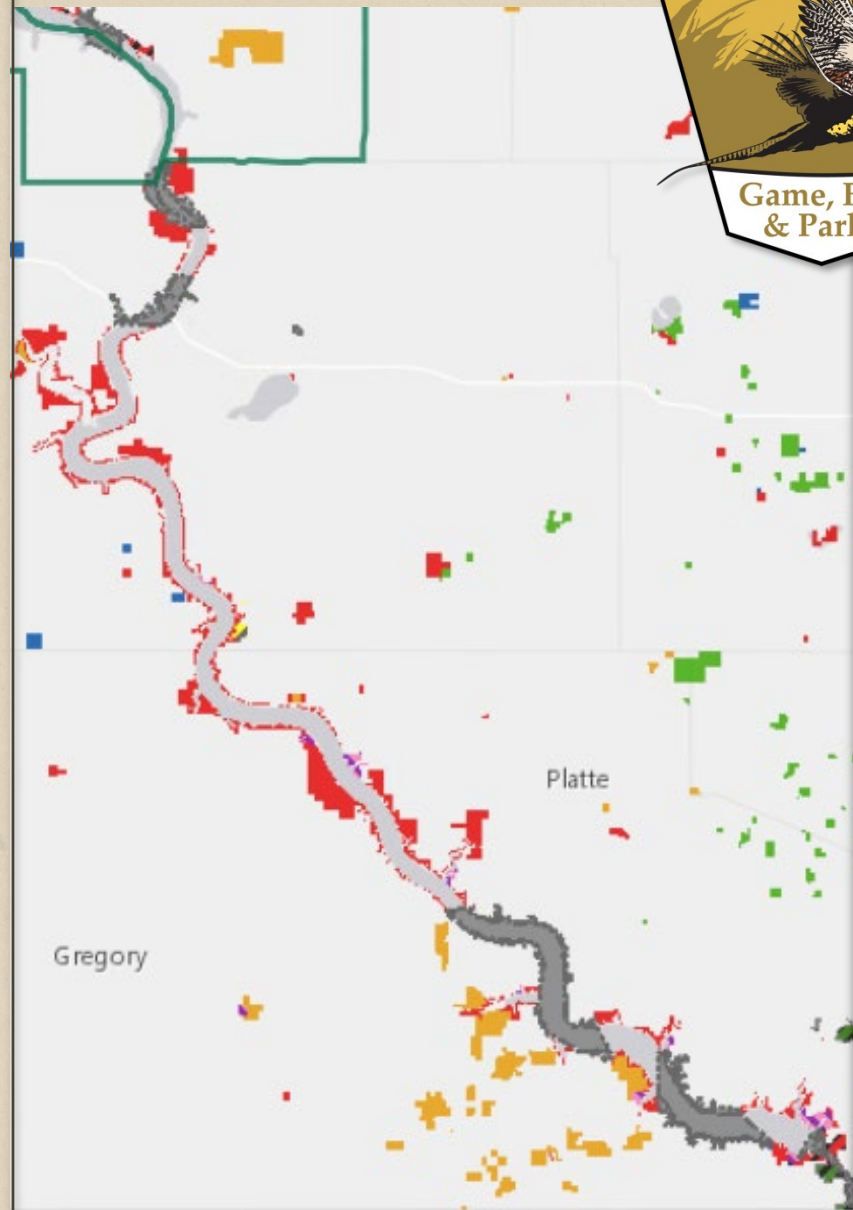
# Lake Sharpe

- 3 Refuges
- 85 River Miles
- 2 Reservations – Lower Brule Sioux Tribe and Crow Creek Sioux Tribe



# Lake Francis Case

- 6 refuges
- 107 river miles
- Borders 3 reservations
  - LBST
  - CCST
  - YST





# What will criteria be used for?

- The criteria could be used by the Commission when any proposed modifications to the refuge system are brought to them.
- Proposals can originate from GFP staff or the public through the petition process.
- Proposals to modify a waterfowl refuge fall under three basic options:
  - Modify a refuge. This can be changing the overall size; changing from a take line to a waterline; altering effective dates; etc.
  - Remove a refuge.
  - Add a refuge.
- The Commission always has the option of not accepting any change proposed.



# What criteria have been identified?

- Current waterfowl use – Low/Medium/High
- Does the refuge contribute to local hunting/viewing opportunities?
- How many miles of shoreline that provide protection from prevailing winds are included in the refuge?



# What criteria have been identified?

- How accessible is the area?
- Are there any non-game benefits?
- Are there any agreements with outside entities involved?
- Are there any safety concerns to consider?

# What criteria have been identified?



- What input have we received from the public?
- Criteria Review Public Meeting Results
  - 80-90 people attended
  - 30 minute presentation
  - Tried to keep the meeting focused on the Draft Criteria
  - Very active meeting with a lot of back and forth dialogue
  - Some attendees did express their concerns regarding decisions to remove some refuges were already made
    - The timeline to make changes was too aggressive
    - Upset about the lack of geese utilizing the MO River
    - Expressed frustration about how refuges need to be closed off to other/all forms of recreational use/activities
  - Some attendees requested the need for more public meetings
  - Did receive some feedback on the draft criteria and received additional criteria topics to consider:
    - What other authorized outdoor activities occur within the refuge boundary that could potentially harass staging waterfowl?
    - Benefits of the Refuge to surrounding landowners?
    - Public vs. private hunting opportunities available in the area?
    - Harvest Limits?

# Assessment tools.



- Data spreadsheets
  - [Highest Waterfowl Counts by MR Refuge & Year.xlsx](#)
  - [MR Waterfowl Refuge Review Table.xlsx](#)
- Database Dashboard
  - <http://sdgfp.maps.arcgis.com/apps/opsdashboard/index.html#/b8d2de939074642b2cdf5117ee59d00>

# Refuge GIS Dashboard



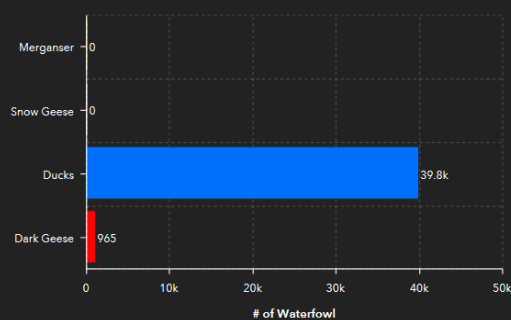
MR Waterfowl 2009-2018

Select Year(s) 2009

## Filter Waterfowl/Boat Ramps by Refuge

Baker's Gulch SWR  
Big Bend Dam SWR  
Blue Blanket SWR  
Chamberlain North SWR  
Chamberlain SWR  
DeGrey SWR  
Fort Randall Dam SWR  
Ft Randall Tailwater  
Joe Creek SWR  
Latin Draw SWR  
**Mail Shack Creek SWR**  
Oake Dam SWR

## In Refuge Waterfowl Numbers



Merganser % - In Refuge/Total



Snow Geese % - In Refuge/Total



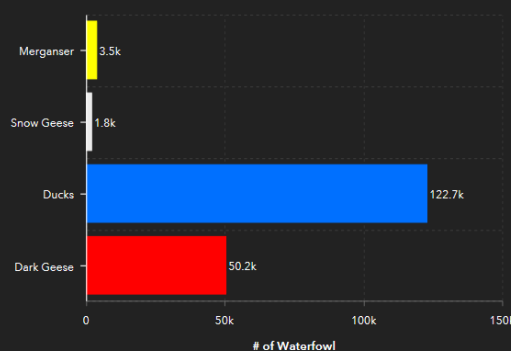
Ducks % - In Refuge/Total



## Filter Out of Refuge/Total Waterfowl by MR Zone

Francis Case - Platte Creek to Boyer Area  
Francis Case - Ft. Randall Dam to Platte Creek  
Francis Case - Boyer Area to Big Bend Dam  
Lake Andes - Lake Andes  
Lake Pocasse - Lake Pocasse  
Lake Sharpe - Big Bend Dam to Joe Creek  
Lake Sharpe - Joe Creek to Antelope  
Lower Missouri - Yankton South  
Lower Missouri - Vermillion South

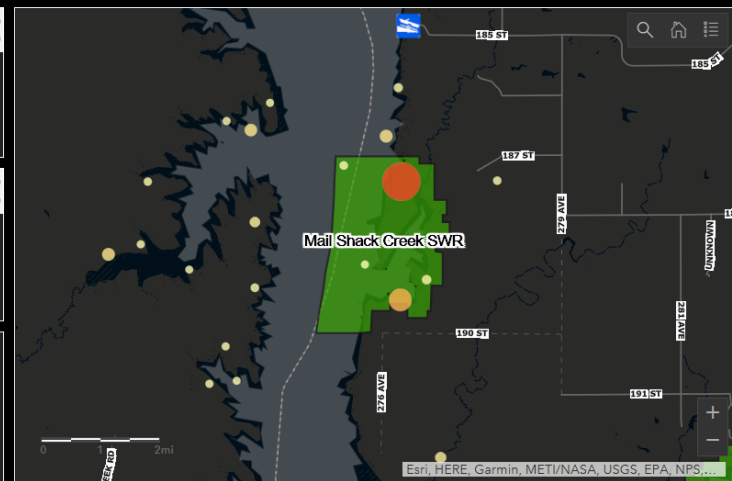
## Out of Refuge Waterfowl Numbers



Dark Geese % - In Refuge/Total



Total Waterfowl % - In Refuge/Total



Mail Shack Creek SWR

Access Points

1

Last update: a minute ago

Mail Shack Creek SWR

Miles to Nearest Boat Ramp

2.2

Mail Shack Creek SWR

Miles to Nearest Refuge

4.2

(Mail Shack Creek SWR)

Mail Shack Creek SWR - Boat Ramps - 1 Mile Buffer

0

1 Mile Buffer

Last update: a minute ago



# Tentative Timeline

- December 6<sup>th</sup> & 7<sup>th</sup>
  - Present Draft Criteria to the GFP Commission
- December 7<sup>th</sup> – January 10<sup>th</sup>
  - Receive additional public input on draft criteria
- January 10<sup>th</sup> & 11<sup>th</sup>
  - Provide Department Recommendations to GFP Commission
- January 11<sup>th</sup> – February 28<sup>th</sup>
  - Receive public input on proposed changes
  - Public hearing: February 28<sup>th</sup>
- March 1
  - Commission action on proposed changes
- Questions?

