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August 28th, 2020

Dear Game, Fish and Parks Commission
Joe Foss Building
523 East Capitol
Pierre, SD 57501
C/o Jon Kotilnek <Jon.Kotilnek@state.sd.us>

Dear Commissioners,

PETITION FOR RULEMAKING Submitted pursuant to SDCL 1-26-13.

Nancy Hilding and Prairie Hills Audubon Society of Western SD submit this petition. Nancy Hilding is a resident of Meade County, SD. Prairie Hills Audubon Society is a non-profit corporation registered in SD and as such is a person by SD law and Supreme Court decisions.

RULE TO BE AMENDED - 41:10:02:05. Endangered fish - Kotilnek version

Jon Kotilnek has been reviewing GFP's rules for sake of improving clarity. At the July 16-17th Commission meeting, the Commission adopted non-substantive changes to the existing endangered fish rule. On August 18th the Interim Rules Review Committee concurred and this rule will be published by the Secretary of State and become a formal SD rule on about September 7th. We submit this petition as an amendment to the rule that will be in place in a few days and at finalization, rather than the rule currently in place, which will soon be gone. They have the same number. Jon just changed the wording of the title a bit.

Exact Rule we seek to amend:

41:10:02:05. Endangered fish. The following fish are classified as endangered in the state:

- (1) Finescale dace, ***Chrosomus neogaeus***;
- (2) Banded killifish, ***Fundulus diaphanus***;
- (3) Pallid sturgeon, ***Scaphirhynchus albus***;

- (4) Blacknose shiner, *Notropis heterolepis*; and
(5) Sicklefin chub, *Macrhybopsis meeki*.

Source: 4 SDR 57, effective March 16, 1978; 10 SDR 76, 10 SDR 102, effective July 1, 1984; 17 SDR 139, effective March 21, 1991; 22 SDR 155, effective May 22, 1996; 33 SDR 125, effective January 29, 2007; 34 SDR 242, effective April 7, 2008; 44 SDR 93, effective December 4, 2017.

General Authority: SDCL 41-2-18(1)(3).

Law Implemented: SDCL 34A-8-3, 41-2-18(1)(3).

41:10:02:06. List of threatened Threatened fish. Fish The following fish are classified

CHANGE REQUESTED

_We wish to add the Lake Chub to the list

We would add the name of the species of lake chub in the row after Sicklefin chub.

41:10:02:05. Endangered fish. The following fish are classified as endangered in the state:

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- (3) Pallid sturgeon, *Scaphirhynchus albus*;
- (4) Blacknose shiner, *Notropis heterolepis*; and
- (5) Sicklefin chub, *Macrhybopsis meeki*.
- (6) Lake Chub (*Couesius plumbeus*)

STATEMENT OF REASONS

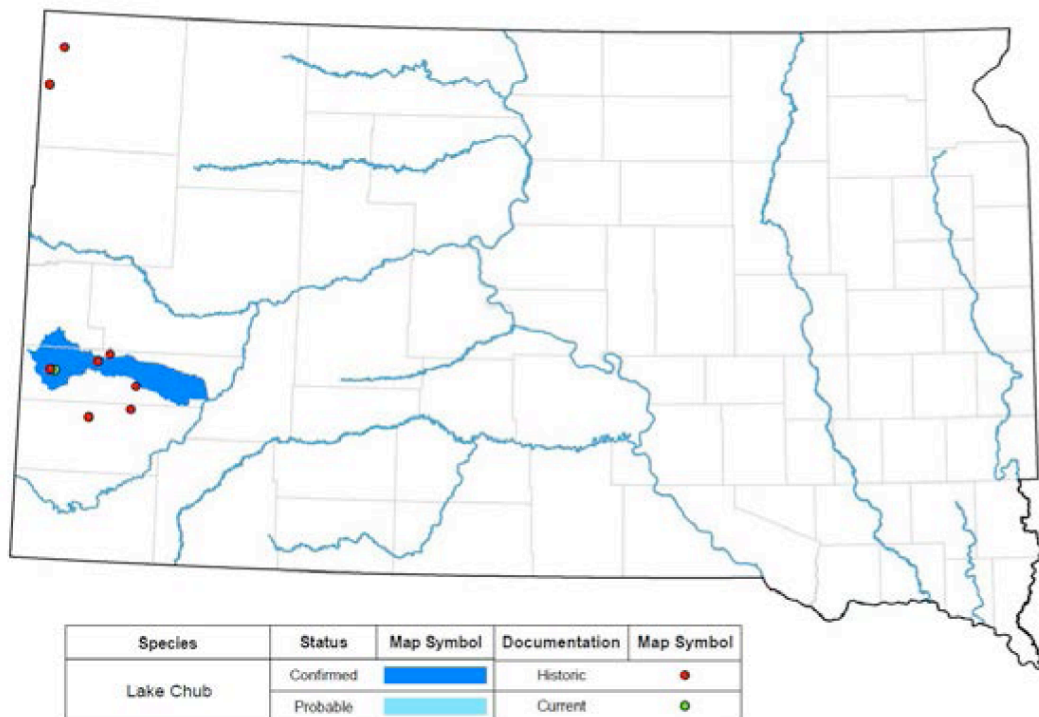
The lake chub is a species of greatest conservation need and is considered critically imperiled in SD

On page 294 SD Wildlife Action Plan Appendix's, SDGFP identifies Lake Chub's challenges as:

"**Conservation Challenges:** • _Modified/suppressed fire regimes • _Exotic/introduced species impacts •

_Ecosystem alteration/habitat degradation ○ Mining • _Pollution/pesticides/herbicides •
 _Grazing/Agricultural practices ○ Heavy grazing • _Forest Management Practices ○ Logging"

Scroll down to the next page for a map from the SD Wildlife Action Plan's Appendix's showing historic sightings of lake chub (no current sightings).



The Lake Chub used to exist in some streams in the Black Hills. Scroll down for a map of past locations on page 7 of this letter. It disappeared from these streams and only remained in Deerfield Lake about 2006.

Lake Chub lost from Deerfield Lake

The below chart and text is from the "Black Hills National Forest's 2013-2014 Monitoring and Evaluation Report" published August 2015 on page 73:

"The table below shows the number of lake chub collected during fish population surveys done by the South Dakota Department of Game, Fish and Parks (SDGFP) on Deerfield Reservoir. One lake chub was captured incidental to white sucker removal efforts conducted by the SDGFP in May 2009."

May 2009.

Table 40. Lake Chub collected during fish population surveys.

Gillnet sampling	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007- 2014
# caught	N/A	N/A	N/A	15	155	55	11	6	4	3	1	2	1	0
CPUE*	114.3	105.5	109.0	3.8	38.8	13.8	2.8	1.5	0.6	0.8	0.3	0.5	0.25	0

* Catch Per Unit Effort equals the number of fish caught per gillnet set overnight.

Source: SDGFP 2001, SDGFP 2006 and SDGFP unpublished data

SD GFP poisoned Deerfield Lake to get rid of an invasive fish species and in the process may have killed all the Lake Chub.

Then about 2016 the Custer Gallatin National Forest found Lake Chubs at a location in the Grand River and another drainage. This quote about Lake Chubs is from a chart that occurs in the Draft Environmental Impact Statement for the Draft Revised Forest Plan - Custer Gallatin National Forest at page 77:

" Confirmed in SD - Grand River tributary on Forest; also present downstream of Forest Boundary in several Montane HUCs "

On June 11th Eileen Dowd Stukel sent me this text in e-mail as update on Lake Chubs:

"Chelsey Pasbrig provided this answer to your question about the Lake Chub:

"Lake Chub were sampled in the USFS Custer Gallatin National Forest in 2016 from Devil's Canyon in Harding County, however no voucher specimens were taken. The same area was sampled in 2017 and didn't find any. 2017 was a drought year, however it is difficult to confirm or deny this occurrence.

In 2019, the SDGFP stream survey crew sampled Lake Chub in Boxelder Creek in Lawrence County, this was a new tributary that I had not previously sampled Lake Chub. They took a voucher specimen which confirmed the occurrence.

Lake Chub are listed as a SGCN but not T/E species. I would say the justification for this is that the state of SD is on the periphery of its range and we have never had a strong Lake Chub population in South Dakota."

In subsequent years when GFP sampled the streams around Custer Gallatin National Forest and no lake Chub were found. The Custer Gallatin National Forest has since decided the identification in the Grand River drainage was a mistaken ID. I am not sure about their opinion of the ID in the other drainage (Montane HUC downstream of Forest Boundary).

From: Chaffin, Jake - FS <jake.chaffin@usda.gov>
Sent: Monday, August 24, 2020 7:53:44 AM
To: Hansen, Kurt A -FS <kurt.a.hansen@usda.gov>
Subject: RE: Status of Custer Gallatin Plan Revision?

Hi Kurt

There have been no Lake Chub, to date, detected on the Sioux district...there was a mis-ID. In Devils Canyon in 2016 techs erroneously, I am pretty confident, labeled Lake Chub as present. When I went with the crew last year Lake Chub were not present, but Longnose Dace were. I think Longnose Dace were mistaken for Lake Chub. SDFG found the same the year prior.

In an ideal world we will get out for a round of sampling this Fall, depending on COVID, etc. I got the permit from SDFG for collections. Will of course keep ya in the loop on whether we can make it out there.

Jake



Jake Chaffin
Watershed Program Manager

Forest Service
Custer Gallatin National Forest

p: 406-587-6734
jake.chaffin@usda.gov

10 E Babcock St PO Box 130
Bozeman, MT 59715
www.fs.fed.us



However this year Jake Davis August 20, 2020 reported to me by e-mail, that they found lake Chub in Box Elder Creek for the second time:

"Lake chub (N=10) were sampled a second time in Box Elder Creek near Steamboat Rock picnic area on July 21st of this year by SDGFP and USFS BHNF staff. We are now working with USFS on continued monitoring and possible reintroduction plans. "

We believe that there is currently only one current confirmed known location for Lake Chub in SD - Box Elder Creek and the Chub has disappeared from streams in the Black Hills it used to occupy, and warrants listing as an endangered species.

The below chart is from Forest Service document published in 2006, showing SD population conservation status relative to it's conservation status in other areas.

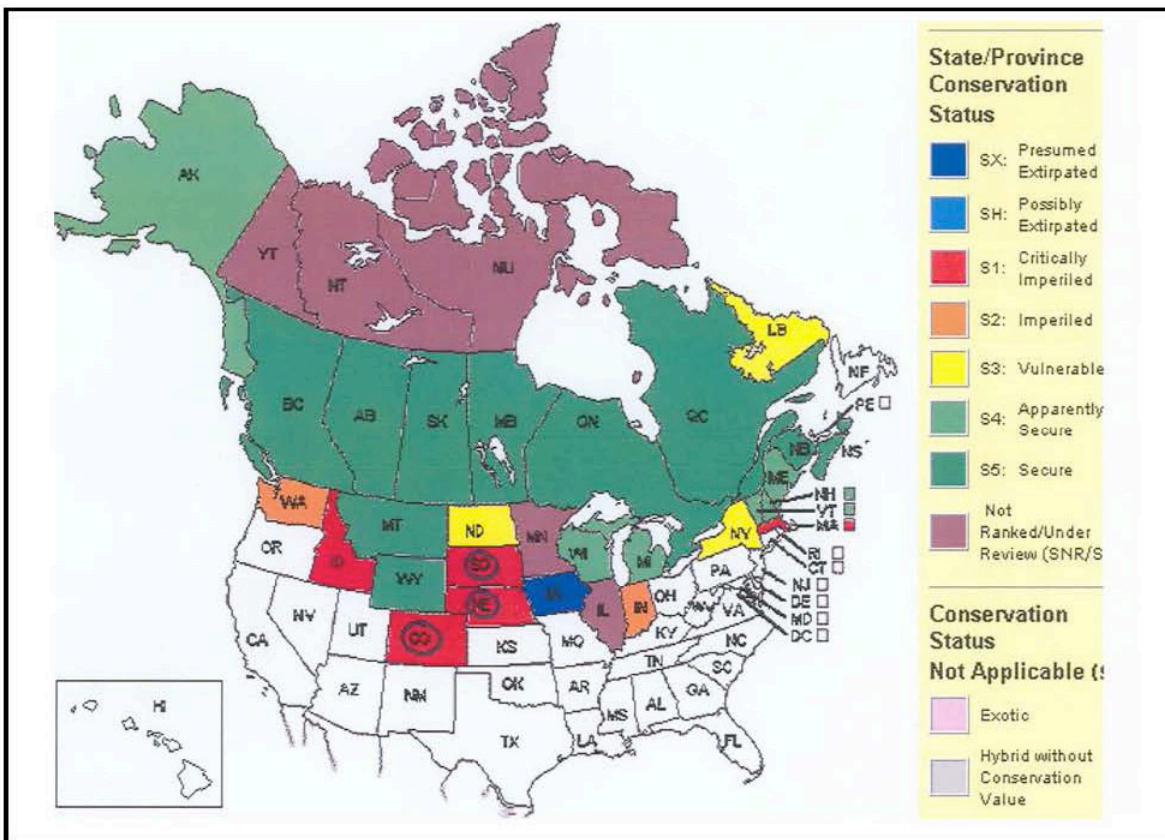


Figure 5. Natural Heritage Database conservation status for lake chub. Note that three of the four states in Region 2 (CO, NE, and SD) are listed as critically imperiled. Nebraska could possibly be considered light blue (possibly extirpated). Modified from NatureServe/explorer.org.

Below (page 7) is a map of historic lake chub sightings in the Black Hills from Forest Service Lake Chub Conservation Technical Assessment from 2006. This lets you know the confirmed locations of the Lake Chub in the Black Hills in history. Please scroll down to the next page

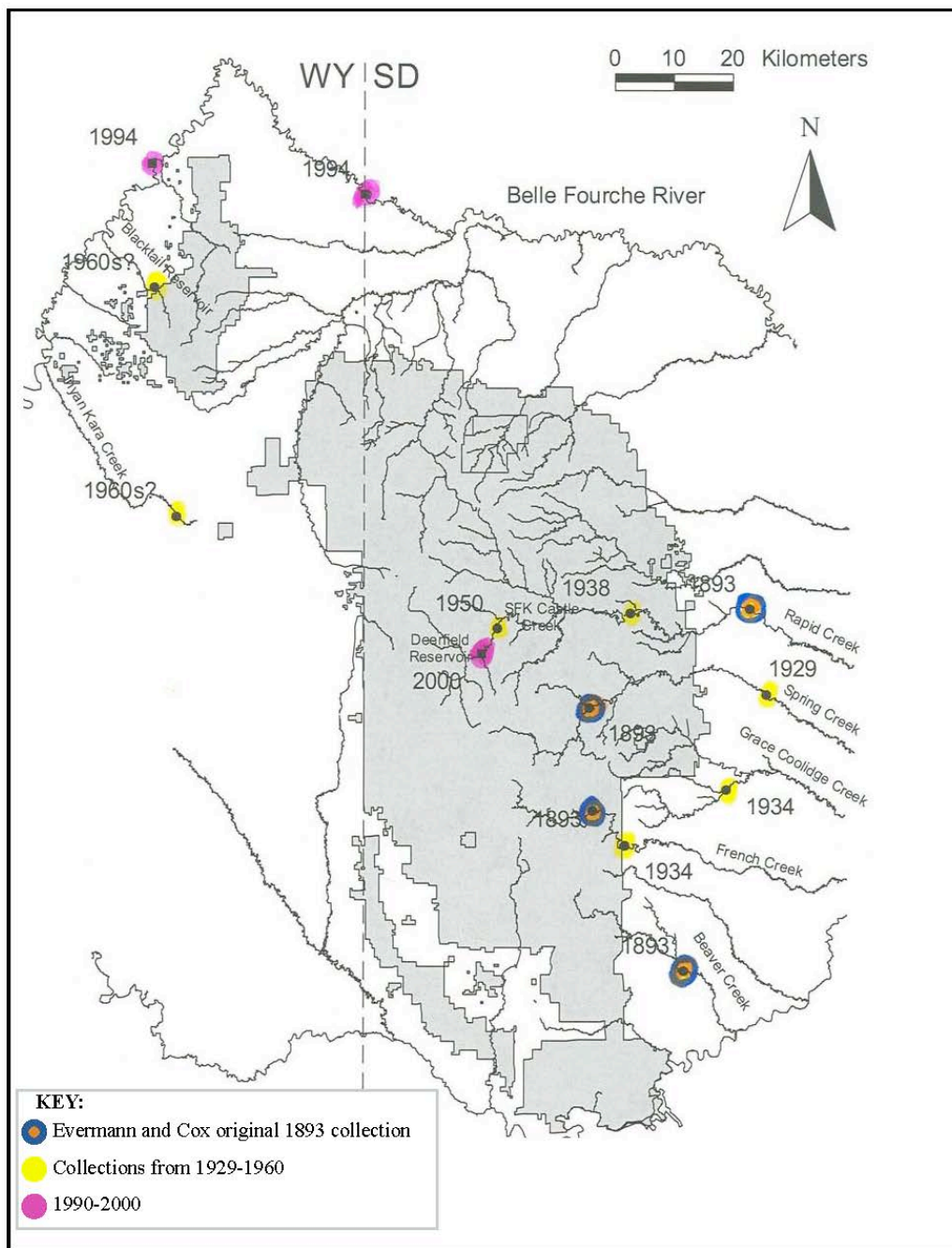


Figure 4. Historic records for lake chub in the Black Hills region of South Dakota and Wyoming. Based on collection data from Evermann and Cox (1896), Bailey and Allum (1962), Eiserman (1966), Patton (1997), Meester (2000), and Wyoming Game and Fish Database. Modified from Isaak et al. 2003.

Eileen Dowd Stukel and/or Chelsey Pasbrig have objected to a threatened or endangered listing for the Lake Chub, as it is in the periphery of it's range in SD. However other SD listed species such as the American Dipper or Fine Scale Dace are also just in the Black Hills in SD. The Black Hills are on the western edge of SD and have some habitat from the Rocky Mountains. Is SDGFP going to refuse to list any more species located in the Black Hills claiming they are all peripheral?

Scroll down for a map from the Forest Services 2006 Lake Chub Conservation Assessment:

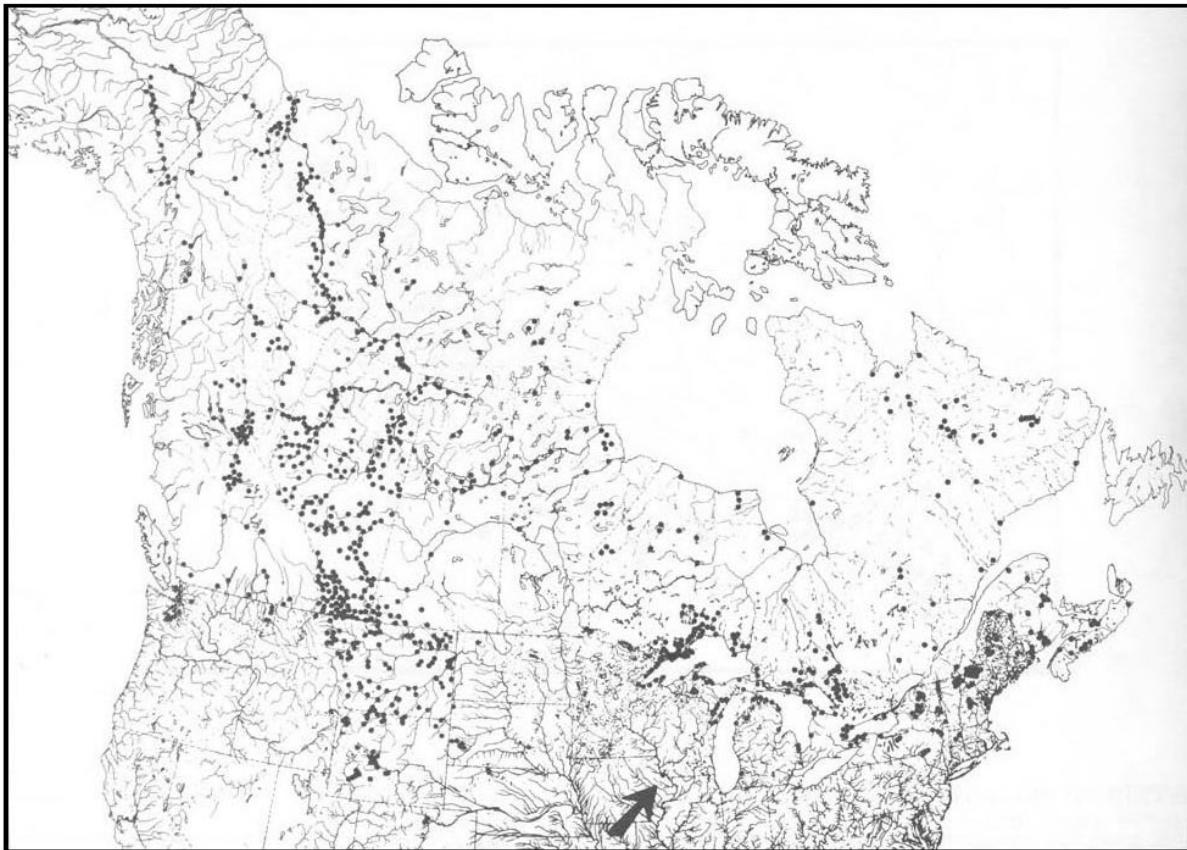


Figure 2. Lake chub distribution in North America. Taken from Wells (1980).

Citations

South Dakota Department of Game and Fish, Wildlife Action Plan, Appendix
<https://gfp.sd.gov/wildlife-action-plan/>

United States Department of Agriculture, Forest Service, Rocky Mountain Region Black Hills National Forest, "Black Hills National Forest, 2013-2014 Monitoring and

Evaluation Report" published August 2015

Isaak, Daniel J. Ph.D., Hubert, Wayne A. Ph.D., Berry, Charles R Jr., Ph.D.U.S. , Conservation Assessment for Lake Chub (*Couesius plumbeus*), "Mountain Sucker (*Catostomus platyrhynchus*), and Finescale Dace (*Phoxinus neogaeus*) in the Black Hills National Forest of South Dakota and Wyoming," Geological Survey Wyoming Cooperative Fish and Wildlife Research Unit, University of Wyoming, Laramie, WY 82071

<https://www.fs.fed.us/rm/boise/AWAE/scientists/profiles/Isaak/FishConservationAssessmentForBlackHillsNF.pdf>

Stasiak, R. (2006, May 4). Lake Chub (*Couesius plumbeus*): a technical conservation assessment. [Online]. USDA Forest Service, Rocky Mountain Region. Available:

<http://www.fs.fed.us/r2/projects/scp/assessments/lakechub.pdf>

or

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5200373.pdf

United States Department of Agriculture (USDA) Forest Service, Draft Environmental Impact Statement for the Revised Forest Plan , Custer Gallatin National Forest , Volume 1: Chapters 1 through 4, Forest Service Northern Region Publication No. R1-19-08, March 2019

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Sincerely,



Nancy Hilding
President
Prairie Hills Audubon Society
and for Self

1 Attachment, Excerpt from the SD Wildlife Action Plan on Lake Chb

South Dakota Wildlife Action Plan

Lake Chub

LACH

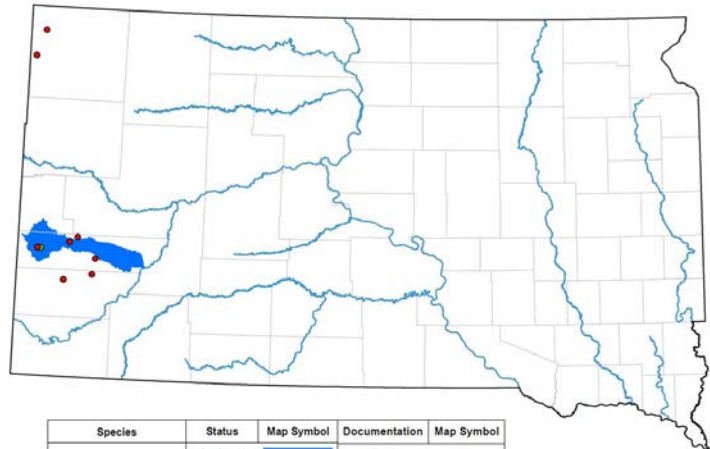
Couesius plumbeus

Description:

- Silver-gray color with light belly
- Lead colored mid lateral stripe is present but not conspicuous
- Scattered dark scales give a speckled appearance
- Well-developed barbel located at corners of mouth

Protection Status:

- Federal: None
- State: None
- Global Rank: G5 (Secure)
- State Rank: S1 (Critically imperiled)



Distribution:

- Western SD-tributaries to the Cheyenne & Belle Fourche River basins
- SD is on the southern periphery of the range for this species

Key Habitat:

- Occurs in varied habitats, both large/small water bodies & standing/flowing waters
- Prefer gravel bottomed pools & runs of streams & along rocky lake margins

Conservation Challenges:

- Modified/suppressed fire regimes
- Exotic/introduced species impacts
- Ecosystem alteration/habitat degradation
 - Mining
- Pollution/pesticides/herbicides
- Grazing/Agricultural practices
 - Heavy grazing
- Forest Management Practices
 - Logging

Conservation Actions:

- Increase partnerships & cooperative arrangements
- Increase educational efforts
- Promote management practices that reduce/limit soil erosion & nutrient/pesticide runoff
- Develop programs to reduce or eliminate the treat non-native species on Lake Chub
- Develop captive breeding and reintroduction programs for Lake Chub into suitable habitats

Current Monitoring & Inventory Programs (Appendix E):

- Western prairie streams and rivers inventory survey

SWG Accomplishments (Appendix F):

- An aquatic invasive species risk assessment for South Dakota – T-36

Priority Research & Monitoring Needs (Appendices G-K):

- Determine distribution & current status through monitoring efforts
- Assess population dynamics & genetic variation
- Identify critical habitats & limiting factors
- Research seasonal movements & recolonization capabilities
- Investigate captive breeding capabilities for future reintroductions

South Dakota Wildlife Action Plan

Existing Recovery Plan/Conservation Strategies:

Isaak, D.J., W.A. Hubert, and C.R. Berry. Jr. 2002. Conservation Assessment for Lake Chub, Mountain Sucker, and Finescale Dace in the Black Hills National Forest, South Dakota and Wyoming. USDA Forest Service, Rocky Mountain Region