STATE OF COLORADO

Colorado Water Conservation Board
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TO: Colorado Water Conservation Board Members

FROM: Ted Kowalski
Linda Bassi
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DATE: January 16, 2014

SUBJECT: **Agenda Item 11, January 27-28, 2014 Board Meeting**
Interstate, Federal and Water Information Section – Species Conservation Trust Fund, FY 14-15 Funding Recommendations

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Introduction
The Native Species Conservation Trust Fund (SCTF) was created in 1998, pursuant to HB98-1006. After its initial creation, the General Assembly expanded the SCTF to cover studies and programs within Colorado Parks and Wildlife (CPW) dedicated to recovering species listed as threatened and endangered under state law; recovering and protecting federal candidate species; conducting scientific studies related to the listing or delisting of any species; and evaluating genetic, habitat and declining species baseline data.

Each year, the Executive Director of the Department of Natural Resources (DNR) prepares a "species conservation eligibility list" (SCEL) after consultation with the CWCB and its director, and the Commission and director of CPW. The SCEL describes programs intended to accomplish the goals first articulated in HB98-1006, and associated costs eligible for funding. The SCEL is then sent to the General Assembly for review and modifications as appropriate prior to the passage of the annual SCTF bill.

Staff Recommendation
Staff recommends, contingent upon appropriations, that the Board: 1)concur with the DNR Executive Director's proposed recommendations to the General Assembly to approve an expenditure of up to $5,000,000 from the SCTF for FY 14-15 for the projects and programs outlined herein; and 2) forward a statement of concurrence to the CPW Commission.

Additional Information – Species Conservation Trust Fund
Distribution of Funds
The Act requires that funding be distributed for the following purposes:

1. Cooperative agreements, recovery programs, and other programs that are designed to meet obligations arising under the federal "Endangered Species Act of 1973" and that provide regulatory certainty.
2. Studies and programs established or approved by the CPW and the Executive Director of the DNR regarding:
    (a) Species placed on the state endangered or threatened list;
    (b) Candidate species, in order to assist in the recovery or protection of the species to avoid listing of the species; and
    (c) Scientific research relating to listing or delisting any species.

Current SCTF Balance and related considerations

The unobligated balance in the SCTF is currently projected to be as much as $5 million for FY 14-15, although this amount is dependent upon actual severance tax receipts in the remaining months of FY 13-14.

Severance tax projections will be updated on March 20, 2014, at which time the Executive Director's office will make its final determination about the total amount of funds available for expenditure from the SCTF in FY 14-15. Since severance tax receipts are subject to some volatility due to fluctuating energy prices as well as variable local property tax rates and associated credits energy producers can apply towards state severance tax liability, it is possible that there could be less than $5 million available to fund FY 14-15 SCTF projects. Should less money be available for expenditure than current projections indicate, staff recommends that the Board authorize reduction of FY 14-15 contributions proportionally from the amounts described in more detail below, unless staff deems it necessary to reduce amounts based on prioritization, project need and the matching capacity of project partners.

FY 2014-15 Recommended Projects

The recommended projects for FY 14-15 are summarized below.

CWCB Projects Total Request: $2,000,000

1. Selenium Management Program/Selenium Research, Monitoring, Evaluation and Control Activities: up to $500,000

The Gunnison Basin Selenium Management Program (SMP) is a required conservation measure identified in the Programmatic Biological Opinion (PBO, issued by USFWS Dec. 4, 2009) as part of the Aspinall Unit NEPA evaluation (PFEIS, issued December 2010). The USFWS has determined that high selenium levels in the Uncompahgre and Gunnison Rivers are limiting the recovery of several Colorado River endangered fish species and that a SMP is necessary to avoid a finding that basin water operations are causing jeopardy to the continued existence of those endangered species. By meeting the targets set in the SMP, critical historical water uses are protected and basin water users are provided regulatory certainty that continued operation of their water projects will not be found to be in violation of the Endangered Species Act. Pursuant

to that mandate, the CWCB, on behalf of the State of Colorado, on October 15, 2010 entered into a Memorandum of Understanding (MOU) with Reclamation and the other affected parties under which they agree to develop the SMP to meet the PBO goals and assist in the recovery of the endangered fish.

The SMP Program Formulation Document (SMP-PFD) was transmitted from the U.S. Bureau of Reclamation on behalf of the SMP partners and beneficiaries to the USFWS on Jan 3, 2012. It sets aggressive goals for selenium reductions in order to comply with the Endangered Species Act over the next 15 years. As outlined in the PBO and SMP-PFD, affected parties, including Reclamation, basin water users and the State of Colorado must act together to achieve these goals. The primary selenium control measure will be accelerated implementation of irrigation system improvements through the existing Colorado River Basin Salinity Control Program (CRBSCP); however, that program is prohibited from spending any additional funds on the incremental costs associated with selenium control. The SCTF appropriation sought for FY 14-15 will continue to be used to provide cost share support to CRBSCP projects and to cover the selenium-specific costs of related study activities. It is estimated that SCTF funds will be leveraged at a ratio of 1:2 or better through this process. In addition, the SMP identifies other opportunities for the CWCB to assist basin water users in meeting the selenium reduction targets and/or determining the effectiveness of selenium control as a component of endangered fish species recovery. Specifically, the FY 14-15 authorization requested herein will be used to support implementation of the USGS Science Plan recommendations through the following three activities:

- Updating geospatial-statistical models to identify and rank selenium loading from Lower Gunnison subbasins.
- Continuation of collection and analysis of groundwater samples.
- Collection of sediment and biological sampling data and development of ecological modeling tools to better assess selenium impact on endangered species.

2. Yampa Basin Non-native Species Control: up to $500,000

The Upper Colorado River ESA Recovery Implementation Program has been recognized as a model program for supporting water development while recovering endangered species. To date, hundreds of water projects have undergone streamlined consultations with the Fish and Wildlife Service through this Program. However, recently in the Yampa River Basin in particular, non-native/native fish interactions have threatened some of the success associated with the recovery of the endangered fish within the Upper Colorado River basin. Successive dry years during the current drought have resulted in significant population increases of non-native species such as small mouth bass in the Yampa River. Despite ongoing non-native species control efforts in the Yampa River and throughout the Upper Colorado River system, there is growing concern that the increasing non-native fish populations are impeding the progress of recovering the endangered fish. Additional non-native fish management activities will target several backwater areas and stream reaches where non-native fish populations have recently increased, and areas of apparent illicit stocking of non-native fish.

3. Morgan Bottom Infrastructure Upgrade and Habitat Restoration Project: up to $500,000

The 14- mile reach of the Yampa River known as Morgan Bottom near Hayden supports numerous diversions and irrigated acres on meadows, benches, and bottomlands adjacent to and near the river. This reach also provides in-channel habitat to three sensitive native fish species (bluehead sucker, flannelmouth sucker, and roundtail chub) and supports a globally rare assemblage of riparian vegetation species. The Nature Conservancy ("TNC"), which owns and operates the Carpenter Ranch located adjacent to the Morgan Bottom reach, local ditch companies and neighboring ranchers are working together to address issues on the river stemming from past flood damage and outdated or poorly sited irrigation infrastructure. These issues include altered channel alignments, removed riparian vegetation, and headgates that are isolated from their source of water supply and require temporary seasonal measures to enable diversions. The stakeholders are developing strategies to restore riparian habitat, upgrade irrigation infrastructure and control erosion along this reach of the river. The goal is to address to address the above issues on a more permanent basis while helping to harmonize resource protection with continued human uses of the river's water resources. The proposed SCTF funding in the amount $500,000 would be applied to a portion of the cost of executing the emerging plan, currently estimated to be in excess of $2 million. TNC and project partners will raise remaining funding required to execute the envisioned restoration and infrastructure upgrades from suitable public and private sources, thereby creating significant leverage for the proposed SCTF investment.

4. CWCB/CPW Native Fish Passage Design and Construction at Flood-affected Diversions: up to $500,000

The flooding events on the Platte River in September, 2013 has been well documented and recognized as one of the most devastating flooding events that Colorado has faced. In addition to the hundreds of millions of dollars of destruction that occurred to roads and property, diversion structures and riverbeds were also dramatically affected. The CWCB is involved with dozens of other efforts related to flood-related recovery. Some of these efforts relate to the reconstruction of diversion structures. The CWCB and CPW are involved with these projects and are working with affected ditch companies within the flood-affected area (see attached maps) to design, install, and monitor fish passage structures at strategic water diversion locations in order to improve population persistence of native plains fishes. With this funding, the CPW and CWCB intend to improve connectivity and population persistence for native fish species such as the Cutthroat Trout, Brassy Minnow, the Common Shiner, and the Suckermouth Minnow.

CPW Projects Total Request: $3,000,000

1. Native Terrestrial Wildlife Conservation ($638,000)

- Implement the recently approved rangewide conservation plan for the lesser prairie chicken, including habitat improvement and evaluating prairie chicken use of different habitat treatments to inform future management.

- Survey southwest willow flycatchers (federal endangered species) and important habitats as required by the U.S. Fish and Wildlife Service.
- Continued work on controlling plague in prairie dog colonies. This work was instrumental in the recent Fish and Wildlife Service decision that listing the Gunnison prairie dog as threatened or endangered was not warranted.
- Monitor native bat species for the occurrence of white-nose syndrome and inform management decisions should the deadly fungus be detected.
- Contract for the production of native seeds for critical habitat restoration and improvement (e.g., sage-grouse) projects.
- Develop a standardized technique to monitor the effects of environmental change on reptiles (2 species are currently being considered for listing under the ESA).

2. Native Aquatic Wildlife Conservation ($1,012,000)

- Continue work on native cutthroat trout (creating and improving habitat and unraveling the complicated genetics)
- Continue work on determining the historic and current distribution of three native fish species of concern (flannelmouth sucker, bluehead sucker and roundtail chub) and evaluate non-native sucker removal (to improve native fish survival). Develop captive broodstocks and husbandry techniques for the three species.
- Evaluate the impact of aquatic parasites on the survival and recruitment of native cutthroat trout and whitefish.
- Evaluate the effects of endocrine disrupters on native plains fish of concern in the South Platte River.
- Monitor native fish in the South Platte basin to evaluate the effects of the 2013 flood on species abundance and distribution.
- Evaluate genetic diversity of common shiner populations to facilitate identification of the most robust populations for augmentation in the wild.
- Develop techniques to detect the fungus causing significant amphibian population declines and evaluate the impact of chytrid fungus on boreal toads.

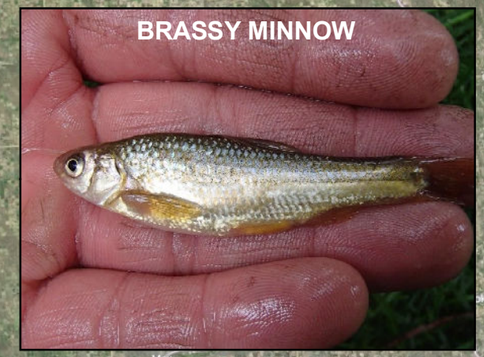
3. Colorado Natural Areas Program ($350,000)

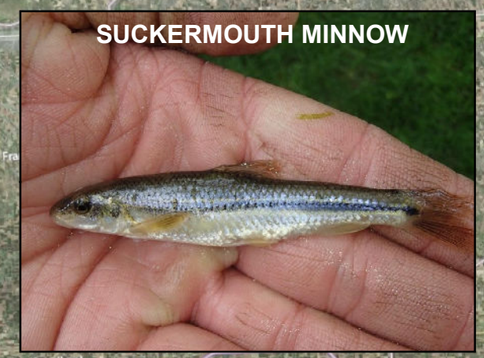
- Conduct a wildlife and rare plant inventory, monitoring and planning program for CPW properties and natural areas to address conservation needs of listed and candidate species and species of concern.

4. Native Species Management, Monitoring and Propagation ($1,000,000)

- Continue work related to a variety of species of concern, including black-tailed prairie dogs, lynx, eastern plains fish, greenback cutthroat trout, Colorado River native fish, black-footed ferrets, and multiple grouse species (e.g., lek counts). Expenses include contracted services, operating costs and a portion of salary and benefit costs of CPW personnel (based on actual time and costs spent on these projects).

Attachments: South Platte Fish Passage Priorities Maps (2)





Fish passage priorities were developed with distribution data for the following native species:
- Brassy Minnow, Common Shiner, and Suckermouth Minnow

Fish passage priorities were weighted using current and historical presence data for each of the three species. Current distribution is defined as any occurrence from 1999 to present, while historical distribution is defined as any occurrence prior to 1999.

Priority 1 - Stream reaches with multiple native species currently present and historically high biodiversity.
Priority 2 - Stream reaches with a single native species currently present or historically high biodiversity.
Priority 3 - Stream reaches with a single native species historically present.
Priority 4 - All other streams.

PRIORITY STREAMS FOR NATIVE FISH PASSAGE

- PRIORITY 1
- PRIORITY 2
- PRIORITY 3
- PRIORITY 4

0 5 10 20 30 40 Miles

N

NATIVE FISH PASSAGE	
DRAWN: ERICHER	1/7/2014
CHECKED:	
APPROVED:	
SHEET: 1 OF 1	

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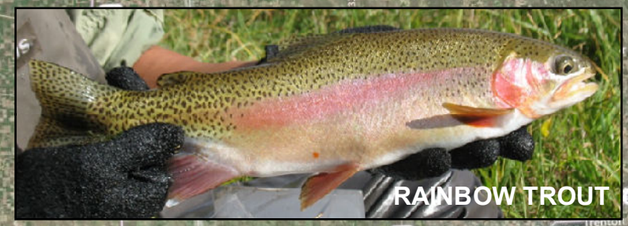
COLORADO PARKS AND WILDLIFE
FORT COLLINS, COLORADO

SOUTH PLATTE BASIN FISH DISTRIBUTION MAP



Trout passage priorities were developed with distribution data for the following species:
- Brown Trout, Cutthroat Trout, and Rainbow Trout

Priority 1 - Transition zones that connect over-winter habitat at lower elevations to spawning and rearing habitat in higher-elevation mountain streams.
Priority 2 - Major streams and rivers above and below the transition zones.
Priority 3 - All other streams.

PRIORITY STREAM FOR TROUT PASSAGE

- PRIORITY 1
- PRIORITY 2
- PRIORITY 3

0 5 10 20 30 40 Miles

N

TROUT PASSAGE	
DRAWN: ERICHER	1/7/2014
CHECKED:	
APPROVED:	
SHEET: 1 OF 1	

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SOUTH PLATTE BASIN FISH DISTRIBUTION MAP