STATE OF COLORADO

Colorado Water Conservation Board
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TO: Colorado Water Conservation Board Members

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DATE: January 10, 2012

SUBJECT: **Agenda Item 18, January 23-24, 2012 Board Meeting**
Interstate, Federal, and Water Information Section – Species Conservation Trust Fund FY 12-13 Funding Recommendations

Background
The Native Species Conservation Trust Fund (SCTF) was created in 1998, pursuant to HB98-1006. Each year, after consulting with the CWCB and its director, the Colorado Wildlife Commission and the director of the Colorado Division of Parks and Wildlife, the Executive Director of the Department of Natural Resources prepares a "species conservation eligibility list." The list describes programs intended to accomplish the goals first articulated in HB 98-1006 (see "distribution of funds" section below for a brief description of these programs' objectives) and associated costs eligible for funding.

The "species conservation eligibility list" ("SCEL") is then sent to the General Assembly for review and modification as appropriate prior to the passage of the annual SCTF bill. After its initial creation, the General Assembly expanded the SCTF to cover studies and programs within the Division of Wildlife and State Parks (now Colorado Division of Parks and Wildlife) 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.

Staff Recommendation
Staff recommends, contingent upon appropriations, that the Board: 1) concur with the DNR Executive Director's proposed recommendation to the General Assembly to approve an expenditure of up to $4,500,000 from the SCTF for FY 12-13 for the projects and programs outlined herein; and 2) forward a statement of concurrence to the Colorado Parks & Wildlife Commission.

Attachments

Additional Background – Species Conservation Trust Fund, FY 12-13

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 CDOW 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 $4 million for Fiscal Year 2012-2013, though this amount is dependent upon actual severance tax receipts in the remaining months of Fiscal Year 2011-2012. There also may be an additional $.5 million resulting from the reallocation of instream flow acquisition dollars as described in more detail below. Therefore, the balance in the SCTF available for expenditure in FY 2012-13 is currently estimated to be as much as $4.5 million.

Severance Tax projections will be updated on March 20, 2012, 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 2012-2013. 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 toward state severance tax liability, it is possible that there could less than $4 million available to fund FY12-13 SCTF projects. Should less money be available for expenditure than current projections indicate, Staff recommends that the Board authorize staff to reduce FY 2012-13 contributions from the amounts described in more detail below on a proportionate basis based upon project need and the matching capacity of project partners.

FY 2012-13 Recommended Programs

1. Relief Ditch Improvement Project: up to $500,000

The Relief Ditch is a pre-Colorado River Compact direct diversion irrigation water right and is the #5 priority on the Gunnison River with an 1890 appropriation date diverting 51 cfs to the south side of the river. The proposed project will construct a sustainable diversion structure that diverts the full allowable amount of decreed water to the Relief Ditch by constructing a low head boulder diversion structure and concrete headgate while removing an antiquated existing diversion structure. It will reduce entrainment in the canal of both native and sport fish species and provide better access for fish to migrate upriver by reconnecting currently fragmented habitat. According to the latest survey of this reach of river by the Colorado Division of Parks and Wildlife, the native fish species present are roundtail chub, bluehead sucker, flannelmouth sucker, mottled sculpin, and speckled dace as well as non-native rainbow and brown trout.

The current diversion structure employs pieces of railroad iron driven vertically into the river bed and an unreinforced gravel 'pushup' dam. The irrigation company must use heavy equipment in the riverbed at least once a year to pushup the gravel structure which contributes to downstream

sedimentation, bank erosion, and down-cutting of the riverbed, thereby harming riparian vegetation and instream habitat. The new structure will remove the necessity of annual heavy equipment use by employing a permanent low head diversion dam and headwall structure that provides a path for fish movement and safe boater passage. It will further employ instream structures to reduce streambed erosion from the site of the existing diversion structure when it is removed. Reclamation through the use of fill material and bank protection structures will also occur.

This project is located approximately 4 miles downstream from the confluence of the Gunnison and North Fork of the Gunnison rivers and is included within the boundaries of the Bureau of Land Management's (BLM) Gunnison Gorge National Conservation Area, an area that has been the focus of many recreational improvements. In addition to producing the expected benefits to fish species, this reconstruction will provide other benefits as well. The Relief Ditch irrigators will reduce annual costs and improve water delivery efficiency. Commercial and private boaters will experience safer passage and hunters, fishermen and wildlife will all benefit from an improved river corridor environment. Delta County's economy will also benefit from the creation of short term construction jobs and long term increased usage of the river resource.

This project is being guided by a management committee comprised of representatives from the Relief Ditch Board of Directors, National Trout Unlimited, Gunnison Gorge Anglers, Grand Valley Anglers, Colorado River District, BLM, Colorado Division of Parks and Wildlife, and Bureau of Reclamation. Over $50,000 has been raised to fund the design phase of the project which is very close to completion and engineering certification and has been approved by the Relief Ditch Board of Directors. Approximately 50% of that funding was through a Healthy Rivers Fund grant, 40% through a Watershed Restoration fund grant, 8% through national, state and local Trout Unlimited monies, and 2% through a BLM donation.

Fund raising for the construction phase has begun and more than $100,000 has been raised for construction. The current cost estimate for construction of the project is $600,000 (though this could increase upon completion of the design phase). Significant statements of support for the project have been received from BLM, Colorado Division of Parks and Wildlife, Relief Ditch, as well as commercial and recreational users of the river.

2. Fountain Creek Fish Passage Project: up to $500,000

The persistence of plains fishes (14 species are listed by the State of Colorado as threatened, endangered or of special concern) depend upon stream systems connectivity. In order to prevent further decline and barriers to species recovery, habitat fragmentation must be reversed. Between Colorado Springs and Pueblo, over 20 diversions and other structures exist in Fountain Creek and its tributaries that transform continuous systems into a series of potentially compromised habitats due to fragmentation.

To reconnect two fragmented habitats and create a combined 40 miles of unobstructed plains fishes habitat along the main stem of Fountain Creek, the proposed project would construct a designed fish passage for the 8-foot high Owens Hall diversion dam (OHDD). Specific species that will benefit include Arkansas Darter (a state listed threatened species) and Flathead Chub (a state listed species of concern), although other Colorado plains fish species with similar physical characteristics and habitat requirements are also expected to benefit from the project. The U.S. Army Corps of Engineers' January, 2009 Fountain Creek Watershed study identified fish passage at Owens Hall diversion dam (OHDD) as one of the 13 highest priority projects within the watershed.

The design of the fish passage structure was completed in 2011. Swimming performance data for plains fishes, specifically the Arkansas Darter and Flathead Chub, was developed from a study completed January, 2010 by Ashley D. Ficke, M.S. and Christopher A. Myrick, PHD with the Department of Fish, Wildlife and Conservation Biology, Colorado State University. This performance data was used to design the fish passage. The OHDD fish passage is the first structure of this type designed using performance data for plains fishes.

Since little was known about these species before this project, a second study initiated by the Colorado Division of Parks and Wildlife, in collaboration with the U.S. Geological Survey and others, evaluated the spawning related movement of Fathead Chub in Fountain Creek in relation to the OHDD. It was determined that Flathead Chub movement patterns would provide a good example of other plains fishes movement patterns. Preliminary results from this study suggest that Flathead Chub in Fountain Creek begin to move upstream in mid-May, where a large aggregation of individuals remains at the OHDD through August. Coincidentally, this aggregation is timed with increased male spawning readiness at the OHDD relative to downstream sites. Although most of the marked fish were detected within one (1) mile from where they were originally marked, movements up to twenty (20) miles were detected. As currently operated, the OHDD blocked nearly all upstream movement (assuming fish would continue upstream if the OHDD was passable), as only 0.17% of over 6,000 fish marked downstream and near the OHDD were recaptured at the next upstream barrier (the Chilcotte Diversion). This study appears to underscore the importance of fish passage at OHDD, as well as the need for improving habitat downstream from the OHDD. Colorado Springs Utilities is currently developing a natural channel restoration concept for Fountain Creek below the OHDD that will improve habitat and will provide plains fishes with better physical conditions in which to make their yearly ranging and migration upstream past the OHDD. Channel improvement construction documents are scheduled to be completed in early 2012. With design substantially complete, construction is anticipated to start on the fish passage and the associated channel improvements in the fall/winter of 2012/2013.

Many partners have participated in this project to date to complete fish monitoring, background studies and design for the OHDD fish passage in 2011, including Colorado Parks and Wildlife, U.S. Geological Survey, CWCB Water Supply Reserve Account, Colorado Springs Utilities, Colorado State University, Lower Arkansas Valley Conservancy District, and U.S. Army Corps of Engineers. The total cost of this project is currently estimated to be $1.15 million. This request is for $500,000 of that total sum, with the balance expected to be obtained from matching contributions by project partners.

3. 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. The Final SMP was recently released by U.S. Bureau of Reclamation on behalf of SMP partners and beneficiaries and 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, affected parties, including Reclamation, Basin water users and the State of Colorado must act together to achieve these goals. 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 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 FY2012-13 and future years will be used to provide cost share support to CRBSCP projects, including studies and implementation, to cover the selenium-specific costs of those activities that are not eligible for other funding provided by the CRBSCP. It is anticipated that the SCTF funds will be leveraged at a ratio of 1:3 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. It is anticiated that SCTF appropriations for the Gunnison SMP will be available in future years to continue to leverage other funding opportunities and to meet the multiple needs of the SMP.

4. Instream Flow Water Rights Acquisition: $500,000

The CWCB staff does not anticipate being able to enter into a water rights lease agreement for dedication to the instream flow reaches that support the Arkansas darter this year. The Arkansas darter is listed as threatened in Colorado and is a candidate for protection under the federal Endangered Species Act. At this time, the $500,000 authorized for this purpose last year should be reallocated to other SCTF projects.

5. Colorado Parks & Wildlife Recommendation: up to $3,000,000 to support CPW programs as described in the table below.

Native Terrestrial Wildlife[1]	
Habitat Management	$953,200
Research, Monitoring and Evaluation	$261,800
Native Aquatic Wildlife[2]	
Habitat and Population Management	$800,000
Research, Monitoring and Evaluation	$420,000
Wildlife Disease Management and Landscape Adaptation[3]	**$**560,000
TOTAL	**$3,000,000**

[1]Expanded from "Native Grouse" used in recent years. Anticipate work in FY'12-13 (depending on funding) on white-tailed ptarmigan (a native grouse) and the New Mexico Meadow Jumping Mouse (a mammal for the first time). Would still allow the continuation of projects on sage-grouse (both species), Columbian sharptail and lesser prairie chicken). The expansion of the category leaves the door open to respond to future petitions for federal listing of *non-grouse* species.

[2] Expanded from "Native Fish" used in recent years. Anticipate work in FY'12-13 (depending upon funding) on refining our knowledge of the distribution of the boreal toad.

[3] Includes (in addition to plague in prairie dogs and white-nose syndrome in bats), work on diseases of aquatic wildlife such as chytrid fungus in boreal toads and whirling disease in cutthroat trout. Also includes work on the impacts of bark beetle kill on small birds and mammals as these animals adapt to landscape scale change.