STATE OF COLORADO

Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 721
Denver, Colorado 80203
Phone: (303) 866-3441
Fax: (303) 866-4474
www.cwcb.state.co.us

TO: Colorado Water Conservation Board Members

FROM: Chris Sturm, Stream Restoration Coordinator

SUBJECT: **Agenda Item 31, March 20 - 21, 2012 Board Meeting Watershed and Flood Protection Section, Fish and Wildlife Resources Fund (FWRF) – Proposal to Create Stream Mitigation Banking Protocols (Banking)**

Background

Mitigation banking has become an important, accepted and even the federally preferred means of compensating for negative impacts to natural lands and habitat. A mitigation bank is a site where specific habitats are created, restored, enhanced, or preserved to improve natural function and ecosystem services. The improvements made on a mitigation bank are then accounted for as credits that can be used to offset negative impacts to similar habitat types elsewhere. There are several inherent advantages to banking compared to other mitigation approaches. Most importantly, the habitat improvements in a bank can be completed ahead of a regulated action. That is, the restoration or improvement work has already been completed, monitored, deemed successful, and federally approved prior to permitting any of the impacts that the improvements will offset. The pre-emptive nature of banking also eliminates temporal project impacts since there is no time lag between when the impact occurs and when it is compensated. Finally, the banking strategy helps assure that habitat restoration work is done in the most effective and efficient manner. Unlike on-site mitigation efforts, banks can be strategically located on sites that have the best improvement potential or that meet broader watershed or landscape habitat goals.

Discussion

The applicant, Colorado State University, proposes to develop the Banking Program in cooperation with the US Army Corps of Engineers, US EPA, Colorado Water Conservation Board, Colorado Department of Transportation, Colorado State Land Board (SLB), and Colorado Parks and Wildlife. The Banking Program will co-opt the framework and structures developed for the wetlands mitigation program and adapt it to apply to stream and river habitats. Total project cost is estimated to be $300,000.

Staff Recommendation

Applications for FWRF funding are guided by Board Policies 15 and 20 (attached). The Banking application (also attached) does not directly conform to either policy. However, the proposed Banking program has the potential to influence federally permitted water development projects subject to the Fish and Wildlife Resources Statute, C.R.S. 37-22-122.2. Staff recommends that the Board approve a non-reimbursable expenditure up to $50,000 from the FWRF pending match funding commitments from the EPA, SLB, local state partners, and/or other parties.

Colorado State University
Sponsored Programs
Fort Collins, CO 80523-2002
Phone: (970) 491-6355
Fax: (970) 491-6147

Proposal Transmittal Information

Date: February 28, 2012

TO: **Chris Sturm**
Steam Restoration Coordinator
Colorado Water Conservation Board
1313 Sherman St, Suite 721
Denver, CO 80203
Chris.sturm@state.co.us

Colorado State University submits a proposal entitled, "Development of Stream Mitigation Banking Protocols in Colorado". Dr. Brad Johnson is CSU's Principal Investigator.

Colorado State University, as a state agency, respectfully requests the Grant Agreement be replaced with the standard Inter-Agency Agreement. The signature page has been included in this proposal application.

This office has reviewed and agrees with the proposed budget and all information within the application.

The Research Administrators assigned to this project are:

Vincent "Bo" Bogdanski
Senior Research Administrator
Sponsored Programs, CSU
Fort Collins, CO 80523-2002
(970) 491-5574
Bo.Bogdanski@colostate.edu

Lisa Anaya
Research Administrator
Sponsored Programs, CSU
Fort Collins, CO 80523-2002
(970) 491-0537
Lisa.Anaya@colostate.edu

Please direct questions, correspondence or award documents to either of the individuals named above. Thank you.

FISH AND WILDLIFE RESOURCES FUND GRANT
COLORADO WATER CONSERVATION BOARD

Section 3.1: Applicant Information

Date of Submittal: 2/24/2012

Name of Project: Development of Stream Mitigation Banking Protocols in Colorado

Applicant Information
Name and Address of Applicant Responsible for Project:

Colorado State University

2002 Campus Delivery, Fort Collins, CO 80523-2002

Phone: (970) 491-5574 FAX: (970) 491-6147

Email: bo.bogdanski@colostate.edu

Name and Type of Organization: Colorado State University - Higher Education

Applicant Federal Employer ID Number (FEIN): 846000545

Contact Information, if Different from Sponsor
Name and Address of Applicant Responsible for Project:

Dr. Brad Johnson, PI

Dept of Biology, 1878 Campus Delivery, FTC, CO 80523-1878

Phone: ( ) 970-490-1388 FAX: ( )

Email: bjohnson@lamar.colostate.edu

Submitted by Name
Date 2/28/12

Received by Name
Date

Section 3.2: Project Summary Form

Project Location Information

Nearest Town or City	NA
County	NA
Township/Range/Section	NA
Latitude/Longitude	NA
State Senate District	NA
State Representative District	NA
Stream Name and Watershed	NA
Water Division	NA
Water District	NA

Land Ownership

On a map of scale≥ 1"=2000', indicate all property affected by this project and evidence of ownership or easements for project work. This information should also be shown on an ownership map in the appendices. If the project area has over three property owners, please attach a separate sheet with names and permission status for each.

Name of Landowner(s) NA

Evidence of ownership or easements for river restoration work:

❑ Enclosed ❑ Will forward if requested ❑ Not yet available (explain timeline)

Grant Request (round figures to the nearest $100)

Total Project Cost	Approximately $300,000
Grant Request	$50,000
List Funding Sources	These funding sources are provisional: EPA, CO State Land Board, CO Department of Transportation, and Aurora Water

Brief Description of Project Request (Please limit to no more than 100 words; this will be used to inform reviewers and the public about your proposal):

Mitigation banking ("banking") is a critical component of water project planning and multiple federal policies spell out a preference for using banks to offset unavoidable impacts to regulated habitats. The 2007 Water Resources Development Act singles out the use of banks for such civil works projects. Banking is also directly relevant to State policies, most notably §37-60 CRS. Protocols for wetland banking are well established, but no protocols exist for banking stream mitigation credits. This grant would directly contribute toward development of stream mitigation banking protocols in a collaborative effort with US EPA, Corps, SLB, CDOT, and Aurora Water.

Development of Stream Mitigation Banking Protocols in Colorado: Technical Narrative Description

Submitted to: *Colorado Water Conservation Board, Fish and Wildlife Resources Fund Grant*

Submitted by: *Colorado State University*

Contact: *Brad Johnson, Ph.D., P.W.S.*
Research Scientist
Dept. of Biology
bjohnson@lamar.colostate.edu

Project Need/Definition of the Problem

Mitigation banking ("banking") has become an important, accepted and even the federally-preferred means of compensating for negative impacts to natural lands and habitat. A mitigation bank is a site where specific habitats are created, restored, enhanced, or preserved to improve natural function and ecosystem services. The improvements made on a mitigation bank are then accounted for as credits that can be used to offset negative impacts to similar habitat types elsewhere.

There are several inherent advantages to banking compared to other mitigation approaches. Most importantly, the habitat improvements in a bank can be completed ahead of a regulated action which means that the mitigation is more certain and less risky. That is, the restoration or improvement work has already been completed, monitored, deemed successful, and federally approved prior to permitting any of the impacts that the improvements will offset. The pre-emptive nature of banking also eliminates temporal project impacts since there is no time lag between when the impact occurs and when it is compensated for. Finally, the banking strategy helps assure that habitat restoration work is done in the most effective and efficient manner. Unlike on-site mitigation efforts, banks can be strategically located on sites that have the best improvement potential or that meet broader watershed or landscape habitat goals. Because of the ecological benefits of up-front mitigation, the 2008 Joint Agency Final Rule on Compensatory Mitigation under the Clean Water Act (40 CFR 230; "2008 Rule") along with the 2007 Water Resources Development Act describe a strong preference for projects that have developed or obtained functional mitigation prior to carrying out a regulated action that impacts a stream or wetland. Thus, in the realm of wetlands mitigation policy, there is a clear trend towards the use and value of mitigation banks.

Banking also provides an essential strategic and economic tool for project applicants, particularly on complex projects such as water resource developments. To be precise, banking enables entities to develop and execute long-term strategic mitigation plans in response to predicted future developmental needs. It can also substantially reduce the cost of a project by minimizing the amount of mitigation required by regulators. This is because less mitigation is usually required when the federally-preferred approach is used and the proposed mitigation is completed prior to permitting.

The procedures for aquatic banking are best worked out under the Clean Water Act (CWA) program. It would seem, though, that CWA banking protocols could similarly be used in meeting the mitigation requirements for fish and wildlife impacts under § 37-60-122.2 Colorado Revised Statute (§37-60 CRS). In a 2010 letter to the CPW regarding §37-60 CRS, the Colorado Attorney General emphasized and explained the scope of mitigation requirements for projects impacting aquatic habitats in the state. Stream mitigation related to water development was singled out in particular.

The significance of stream mitigation was underscored during a November 2011 meeting between Aurora Water, me (B. Johnson), and representatives of all three Colorado districts of the U.S. Army Corps of Engineers ("Corps"), including the three Colorado Branch Chiefs and the three District Chiefs. During this meeting, the Corps collectively cautioned that the greatest burden to future water resource development in our state would likely be offsetting impacts to streams and rivers The Corps went on to state that complex water interests would be well-advised to take into account potentially substantial requirements for stream mitigation in their long-term project planning. In particular, they pointed to banking stream credits as an important strategic component of infrastructure planning. The importance of habitat banking is recognized by a variety of state agencies, county governments, and municipalities who have initiated wetland mitigation banking programs – some of which are quite

extensive. The banks are viewed as essential tools in the overall portfolio of management devices available to agencies and governmental entities

The problem is that while the protocols for banking *wetland* credits are fairly well defined in Colorado, protocols for stream banking essentially do not exist, despite the well-defined need. At present, we have no standardized, agreed-upon, practically-implementable means of accounting for stream habitat improvements in Colorado's regulatory program. Furthermore, the interface with regulatory policy under the 2008 Rule, particularly the watershed approach to mitigation planning and permit review – needs to be developed for streams. In the existing aquatic mitigation framework developed by US EPA, Corps (NWO), CDOT, CO Natural Heritage Program, and CSU (B. Johnson), guidance is provided for review of wetland mitigation (bank) plans, but it provides no such guidance for other aquatic resources, stating, "...the framework will be expanded over time to cover other types of aquatic resources (e.g. streams)." We forward this study as a fulfillment of this goal. Specifically, we propose to fill the gap in Colorado's aquatic habitat mitigation policy by providing the technical and procedural means needed to bring stream mitigation banking to the state.

Project Goals and Objectives

This study, as part of a broader US Environmental Protection Agency-funded initiative, would continue a legacy of innovation that is directing the evolution of Colorado's nationally-recognized regulatory program by addressing its critical shortcomings. Specifically we propose to : 1) develop a stream banking protocol in cooperation with the US Army Corps of Engineers (Corps), US EPA, CO Department of Transportation (CDOT), and CO State Land Board (SLB; pending final approval), Colorado Parks and Wildlife (CPW), and 2) further the State's capacity to utilize a watershed approach to mitigation planning and review through a cooperative effort additionally involving Colorado Parks and Wildlife, Colorado Natural Heritage Program, and the City of Aurora Water (pending approval). If awarded, funding from CWCB would be used to support the first goal, so this proposal is specifically focused on the stream banking component of the project.

These funds would be used to complete the non-federal match requirements of the EPA grant program (State Wetlands Program Development Grant). Thus CWCB funds would be strongly leveraged with the funds from the identified federal program as well as the other sponsors. The total project cost at this point is estimated to be in the neighborhood of $300,000 with a total duration of three years. The EPA will be solicited to provide approximately 60% of the total project cost. Thus, if CWCB commits $50,000, it can expect a return on investment on the order of a 600% in terms of leverage and effort towards a project that will benefit it and Colorado water managers directly.

Technical Feasibility of the Project

Our approach to developing a stream mitigation banking program is to co-opt the framework and structure we developed for the wetlands program and adapt it to the particular case of stream and river habitats. Colorado's wetlands program is considered to be a model for the nation by the EPA and the Corps, particularly for its applicability to a watershed approach, which has at its foundation the recently developed Functional Assessment of Colorado Wetlands (FACWet); a scientifically-based methodology for assessing the functional condition of wetland habitats. The model of protocol development and implementation that we used for developing the wetland mitigation program in the

state provides an ideal, proven pathway for developing mitigation planning and banking protocols for streams.

FACWet was developed and refined over the past 5 years by M. Beardsley (EcoMetrics) and me (B. Johnson), with the support of CDOT, the Corps, and EPA. By providing a means of quantifying wetland habitat improvement, the method has become a cornerstone in wetland banking in the state. Our present goal is to include these same partners along with SLB, CWCB, and CPW to produce an analogous companion assessment methodology for streams. Like FACWet does for wetlands mitigation, this proposed method would serve as the technical foundation for stream mitigation credit accounting. Development and calibration of protocols would follow the path that we took with FACWet including several iterations of the model, expert review, and rigorous field testing on sites throughout the state. The ultimate goal would be to generate an effective means of credit accounting that is applicable to the federal bank crediting procedure for streams in Colorado. This activity would not require any permits or water rights.

Project Implementation Plan

Our process for developing a stream assessment methodology applicable for mitigation banking will follow the path we took for developing FACWet. The process begins with an evaluation of existing technology. There are a number of stream mitigation assessment tools available across the country, and the first step in this study would be to evaluate those tools in both the office and field settings to determine their relevance to Colorado's unique natural and programmatic environment. Concurrently with this step, we would coordinate with regulatory agencies and partners to be sure the method accommodates each of their specific needs.

This background information would be used to forge the conceptual framework of the stream banking protocol, and upon this framework we would then construct the specific procedures for assessment, rating, and accounting. Next, the protocol would be tested in the field by applying it under a diversity of scenarios including evaluation of reference conditions, degraded streams, and post-restoration reaches. We would also apply the method on reaches whose condition has been quantitatively documented to provide a comparative means of revising and calibrating the method to assure its accuracy.

The results of these field tests would be used to refine the protocol, to produce a preliminary draft methodology that we would deliver to the multi-agency study team for review. As in the development of FACWet, the new stream protocol would be refined again based on agency review and then subject to another round of field-testing and validation. As the final step in this process, agencies could then implement the protocol as an operational draft methodology for voluntary use within various regulatory applications, particularly the §404 CWA program. Being a "living document", as all such protocols are, it would be further calibrated, validated, and refined by future efforts and experience.

Project Time Schedule

	2012						2013												2014												2015					
Milestone	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
Review existing protocols																																				
Develop conceptual framework and procedures																																				
Test protocols																																				
Revise protocols																																				
Study team review																																				
Revise protocols																																				
Final deliverable																																				

Monitoring Plan

Environmental Monitoring would not be part of this study, although existing monitoring data will be used in protocol development when available or appropriate.

Qualifications of Applicant

The overall study team has diverse expertise across a number of disciplines and agencies including members from the EPA, Corps, SLB, CDOT, CPW, CNHP, CSU, and professional consultation. The primary investigator in this study would be Dr. Brad Johnson, who is a research scientist in the Department of Biology at CSU. Brad has been the lead scientist in the development of all the tools currently in use or under development in Colorado's CWA regulatory program, including the FACWet, wetland profiling, and the Colorado Watershed Approach to Mitigation Planning and Permit Review. He has a long and well-established collaborative relationship with all of the agencies involved.

EcoMetrics, LLC would be a sub-contractor on the overall project. Mark Beardsley, M.S., is the chief scientist at EcoMetrics. Mark brings expertise in ecological assessment and is co-author of the FACWet. More importantly, he also brings a deep technical understanding of stream monitoring, assessment, classification, ecology, geomorphology, and hydrodynamics. For instance, he designed and is carrying out a region-wide, quantitative stream monitoring program for Park County. He has also been involved with many stream restorations, evaluations of project success relative to performance criteria, and has an established reputation and rapport with regulatory and management agencies.

A useable banking protocol has to both meet federal requirements and at the same time be practically-implementable for regulators and applicants alike. Creating a method that serves both of these goals requires not only technical expertise, but also an in-depth knowledge of the banking process that is gained only through actual experience. It is this breadth of practical experience that makes our team uniquely qualified for the challenges of this study. For example, as an expert consultant, Brad developed a wetland mitigation bank for Denver Water, in which he executed the entire process from beginning to end. On this same project EcoMetrics oversaw many of the components of the bank monitoring program. Brad and EcoMetrics also completed a successful large-scale stream restoration project on the same property including project design, construction, monitoring, and evaluation. Together, the two are currently developing a one-of-a-kind, multi-district, state-wide wetland mitigation

bank for Aurora Water and will be carrying out a demonstration of an integrated banking program for the CO State Land Board. In sum, this combination of experiences provides insight like no others have into Federal mitigation requirements, the needs of civil works departments and state agencies, and first-hand knowledge of the banking process.

Coordination Plan and Public Involvement

Unlike many states, Colorado does not have a single state agency that serves as the primary regulatory liaison to federal agencies. Yet Colorado's multiple state agencies have so far been able to work together to create a regulatory program "by committee" that effectively supports federal mandates of the CWA while firmly maintaining control over the management of the state's natural resources. When goals are so aligned and multiple objectives can be achieved, federal agencies, particularly the EPA, have been very willing to contribute to program development.

The CWA regulatory program and its associated mitigation procedures can be understood as having three technical legs supporting it: aquatic habitat mapping to support a watershed approach to planning and review, wetland functional assessment, and stream assessment (Appendix 1). Colorado agencies have been actively directing the development of these supporting initiatives. CPW has been the primary nexus with EPA on habitat mapping and has guided mapping efforts based on shared need. Similarly, because CDOT has the most CWA regulatory interaction with federal agencies, they naturally became an integral part of the development of the CWA regulatory program in the state, taking a lead role in the development of the state's wetland assessment method (FACWet). In both cases, CSU and CNHP have constituted the technical nucleus of the state's wetland regulatory program by systematically mapping habitats across the state and by developing and testing all the technical tools created in response to agency needs. All in all, this has been a highly efficient and fruitful model of program development that has fostered an extremely collaborative and productive environment amongst inter-dependent agencies.

The third, unformed "leg" of the state's CWA regulatory framework is an assessment methodology for streams which is needed to characterize baseline site conditions and to chart habitat improvement gained by mitigation. This component is what we propose to develop in this study. It would seem very much in the best interest of the state to play a strong role in the development of this missing regulatory leg. This is because federal regulations require it, and therefore some method of stream assessment will eventually be instituted in Colorado. Without active state involvement federally-chosen protocols will seemingly have to be imposed upon the state. By developing a stream assessment methodology in-house, the state will be able to maintain control over the way that stream impacts will be mitigated here under the CWA, and federal funds will directly assist state-based mitigation program development. As the primary sponsors of the FACWet and the agency the most mitigation needs, CDOT would clearly play a role in this process. Technical assistance from CPW would also be particularly important. At this early developmental phase, public involvement in this study comes first through technology transfer to agencies that interact with the public, and second through the participation of municipalities and public utilities within the larger project. CWCB and the SLB are two other state agencies that would clearly benefit from the development of a stream assessment method that is tailored to their needs, and thus we are actively inviting their participation.

FISH AND WILDLIFE RESOURCES FUND GRANT
COLORADO WATER CONSERVATION BOARD

Section 3.5: Grant Application Budget Form

Sources of Funds	Date	Grant Request	Cash Match	In-Kind Match	Totals
CWCB		$ 50,000	$	$	$ 50,000
US EPA	Pending		$180,000 (Approximate)		$180,000
State Land Board	Pending		$50,000		$50,000
City of Aurora &					
Partners	Pending		$20,000 (Approximate)		$20,000
Uses of Funds	**Date**	**Grant Request**	**Cash Match**	**In-Kind Match**	**Totals**
CWCB		$	$	$	$
Salary/fringe					
Travel					
Supplies					
Other Direct					
Indirect@ 15% TDC					
Totals		$	$	$	$ 300,000

Total Project Cost: $

Signature _____ **Date** 2/28/12

APPENDIX 1 – Regulatory Program Organizational Diagram

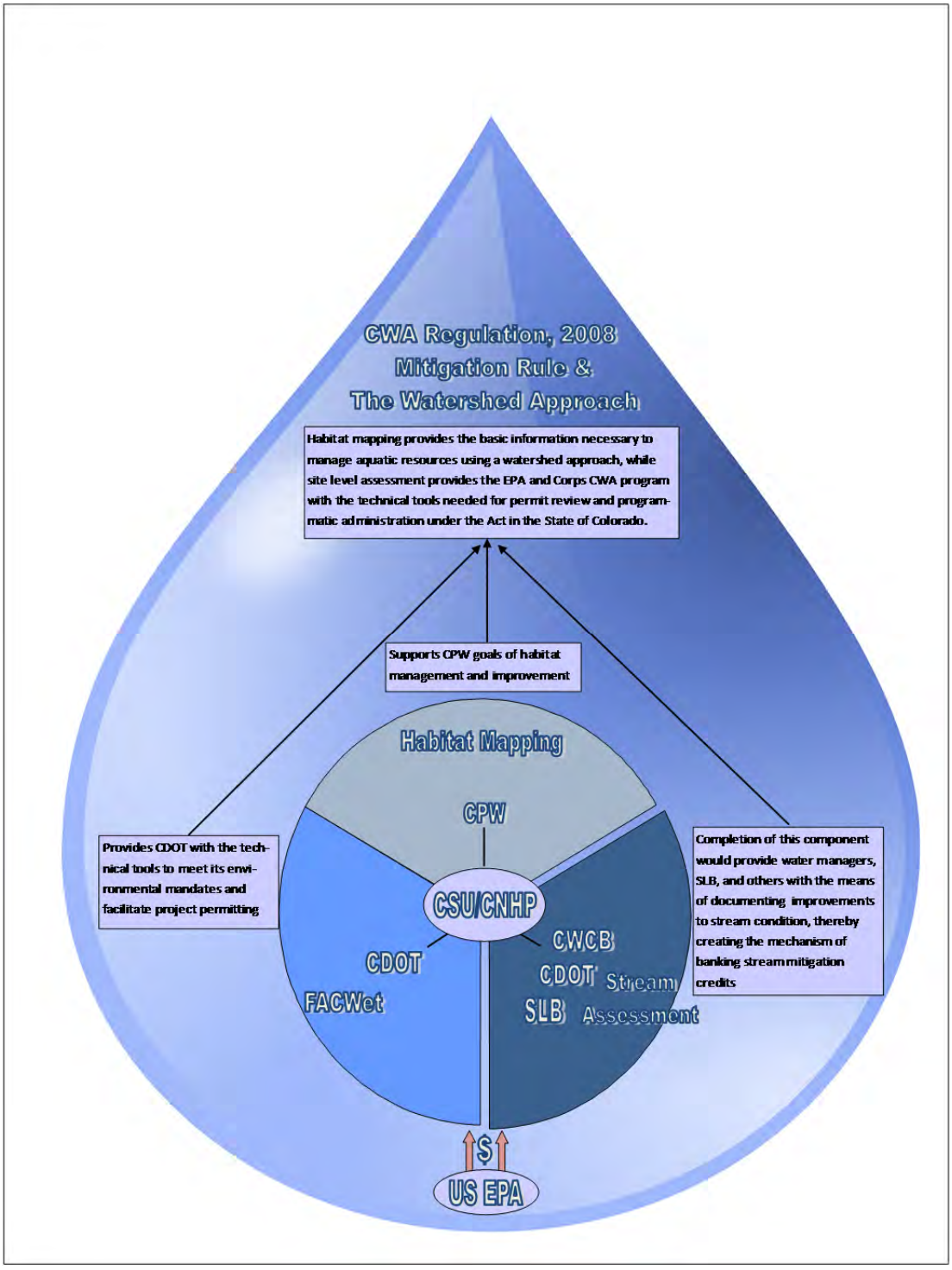

Figure 1. Schematic diagram showing the way in which US EPA funds in support of development of Colorado's CWA program have been, and would be, utilized to meet multiple agency objectives. The upper and lower left pie-pieces represent on-going initiatives, which have received US EPA funds to meet their programmatic objectives. The "exploded" segment, represents the missing piece of the CWA program which would be addressed by this study.

Appendix 2 - Letters of Support

To be supplied at a later date

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION
Environmental Programs
4201 East Arkansas Avenue
Shumate Building
Denver, Colorado 80222
(303) 757-9259

March 6, 2012

Brad Johnson, Ph.D., P.W.S.
Colorado State University
Dept. of Biology, Campus 1878
Fort Collins, CO 80523-1878

Dear Dr. Johnson;

I am writing this letter in support of your project proposal to develop stream mitigation banking protocols for Colorado. The study proposes to create a method by which to evaluate streams and rivers to support and expand mitigation opportunities. As the primary supporter of the development of the Functional Assessment of Colorado Wetlands (FACWet) method, the Colorado Department of Transportation (CDOT) recognizes the value and importance of the creation of a similar method for other aquatic resources. Other parts of the country are already employing stream assessments and mitigation strategies into the 404 regulatory program. It is time for Colorado to fill in the technical and regulatory gaps of complying with the Final Rule on Compensatory Mitigation (2008).

CDOT has a vested interest in improving mitigation success for compensatory requirements under the Clean Water Act. Resources that aid CDOT in this work are extremely useful in making the process more efficient and effective. We are excited to be a part of this important project and hope the Colorado Water Conservation Board, the Environmental Protection Agency, and other stakeholders will also support this endeavor. Partnerships such as these are essential in providing the knowledge and understanding of aquatic resources and for the collaboration required to ensure their protection.

If you have any questions concerning CDOT's support of this project, please contact me at 303-512-4051.

Sincerely,

Rebecca Pierce
CDOT Wetlands Program Manager

POLICY NUMBER: 15

SUBJECT: **CONSIDERATION AND APPROVAL OF FISH AND WILDLIFE RESOURCES FUND APPLICATIONS FOR INSTREAM FLOWS AND RIVER RESTORATION PROJECTS.**

EFFECTIVE DATE: September 12, 2002

POLICY: The Colorado Water Conservation Board (CWCB) will accept applications throughout the year for grants from the Fish and Wildlife Resources Fund for the appropriation or acquisition of instream flow water rights and river restoration construction projects to mitigate the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities.

Applications for mitigation grants from the Fish and Wildlife Resources Fund will be accepted for the following types of projects:

1. The appropriation or acquisition of water rights for the purpose of preserving or improving the natural environment to a reasonable degree to mitigate the impact of an existing water facility.
2. River restoration feasibility studies and construction projects that are designed to directly mitigate or significantly improve the environmental impacts of existing water facilities.

The CWCB may, in any year, approve grants to fund any project in the above categories that the Board deems worthy of funding through the Fish and Wildlife Resources Fund. In order to protect the long-term integrity of the Fish and Wildlife Resources Fund, instream flow and river restoration projects mitigating the impacts of existing water supply facilities will be limited to 40% of the Fish and Wildlife Resources Fund balance as of July 1, 2002.

The project applicant must have completed a fully executed funding contract with the CWCB within 2 years of the grant authorization by the CWCB, or the Board will consider de-authorization of the grant.

PURPOSE: To establish an approval process for instream flow and river restoration construction project grants from the Fish and Wildlife Resources Fund.

APPLICABILITY: This policy and procedure applies to applications for instream flow or river restoration construction project grants from the Fish and Wildlife Resources Fund.

PROCEDURE: Prior to a Board meeting, the CWCB staff will prepare for the Board's consideration a summary of the technical, financial, and institutional characteristics of each proposed instream flow water right appropriation or acquisition, river restoration feasibility study or construction project. Each application will be reviewed for conformity with the goals and

objectives of the CWCB Strategic Plan. Grant applications will be considered only in the following two categories:

1. The appropriation or acquisition of water rights for the purpose of preserving or improving the natural environment to a reasonable degree to mitigate the impact of an existing water facility.
2. River restoration feasibility studies and construction projects that are designed to directly mitigate or significantly improve the environmental impacts of existing water facilities.

The Board will consider and CWCB staff will evaluate and recommend to the Board grant applications for appropriation or acquisition of water rights to be held by the Board based on the following project types:

- Instream flow water rights that assist in the administration of compact-entitled waters, or address problems relating to compact-entitled waters,
- Instream flow water rights that facilitate the resolution of federal water rights issues, and
- Instream flow water rights that assist in the recovery of threatened or endangered wildlife species or the conservation of existing wildlife species within riparian ecosystems.

The Board will consider and CWCB staff will evaluate and recommend to the Board grant applications for river restoration feasibility studies and construction projects based on the following:

- Soundness of the project design, work plan or plan of study,
- The need for the proposed project,
- The need for financial assistance.
- Financial, technical, or administrative participation or coordination by all affected local governments.

NOTE: Recognizing that future needs and responses to those needs cannot be predicted with certainty, the Colorado Water Conservation Board reserves the right to recommend for funding any instream flow acquisition, river restoration construction project, or study that it determines would mitigate the effects of an existing water supply facility and furthers the purposes of the Fish and Wildlife Resources Fund.

Approved by the CWCB
September 12, 2002
Agenda Item #16a

POLICY NUMBER: 20

SUBJECT: **CONSIDERATION AND APPROVAL OF FISH AND WILDLIFE RESOURCES FUND GRANT APPLICATIONS PURSUANT TO SUB-SECTIONS 2-4 OF SECTION 37-60-122.2, C.R.S.**

EFFECTIVE DATE: May 17, 2011

POLICY: The Colorado Water Conservation Board (CWCB) will accept applications throughout the year for grants from the Fish and Wildlife Resources Fund for design plans, engineering, and construction projects to: (1) address impacts from the construction of water diversion, delivery, and storage facilities that require a permit, license, or other approval from the United States; and (2) respond to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

Applications for grants from the Fish and Wildlife Resources Fund will be accepted in the following categories:

1. Mitigation Grants to reduce, minimize, or avoid undesirable impacts on fish and wildlife resources as outlined in the official state recommendation, i.e. the State Fish and Wildlife Mitigation Plan (Mitigation Plan).
2. Enhancement Grants to improve the habitat of fish and wildlife resources beyond existing conditions in the vicinity of the project.
3. Species Recovery Grants for the purpose of responding to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

The Board shall make Mitigation Grants only if the applicant funds mitigation costs for the first 5 percent of the project's design, engineering, and physical construction costs (construction costs). The Board shall make Mitigation Grants for the costs of mitigation for the impacts to fish and wildlife resources from the construction, operation, or maintenance of water diversion, delivery, and storage facilities up to an additional 5 percent of a project's construction costs. Mitigation Grant disbursements shall not exceed 70 percent of the amount of the grant during any fiscal year. Mitigation grants shall be made only for recommendations in the Mitigation Plan. The Board does not intend to make Mitigation Grants for mitigation required outside of the Mitigation Plan. Mitigation should not include that already required by a Federal Record of Decision, County 1041 permit, or other permitting entity. The Mitigation Plan may be adopted as part of a Federal Record of Decision or other permit. If so, the Board shall fund only those components of the adopted Mitigation Plan that are not included as part of the permitting entity mitigation requirement. Mitigation grants shall only be awarded for a project after that project has received a permit, license, or other approval from the United States and/or other permitting entities.

The Board shall consider applications for Enhancement Grants after receiving a recommendation from the Wildlife Commission. The Board may award an Enhancement Grant with the concurrence of the Wildlife Commission.

Enhancement Grant costs will be shared equally by the CWCB and the Division of Wildlife.

The Board shall consider applications for Species Recovery Grants when funding is not available from the Native Species Conservation Trust Fund.

The CWCB may, in any year, approve Enhancement and Species Conservation Grants that the Board deems worthy of funding through the Fish and Wildlife Resources Fund. Mitigation Grants shall be funded and will take precedence over Enhancement and Species Recovery Grants. The CWCB will manage the Fish and Wildlife Resources Fund in a manner that, over time, distributes grants evenly between east and west slope applicants.

In the event that funds in the Fish and Wildlife Resources Fund are insufficient to fully fund a Mitigation Grant request, the applicant will receive disbursements of the grant as the General Assembly allocates such money for such purposes. The CWCB may determine that full funding is not available based on the number of Mitigation Grant applications and the distribution between east and west slope applicants.

Fish and Wildlife Resources Fund allocations will be made for both Board Polices 15 and 20 in the order that applications are received and approved.

The project applicant must have completed a fully executed funding contract with the CWCB within 2 years of the grant authorization by the CWCB or the Board will consider de-authorization of the grant.

PURPOSE: To establish an approval process for grants from the Fish and Wildlife Resources Fund.

APPLICABILITY: This policy and procedure applies to applications for grants from the Fish and Wildlife Resources Fund.

PROCEDURE: Prior to a Board meeting, the CWCB staff will prepare for the Board's consideration a summary of the technical, financial, and institutional characteristics of each proposed design plan or construction project. Each application will be reviewed for conformity with the goals and objectives of the CWCB Strategic Plan. Grant applications for Mitigation Grants shall be funded if the funds are available, and Enhancement and Species Recovery Grants will be considered after Mitigation Grants are fully funded.

The Board will consider and CWCB staff will evaluate and recommend to the Board Enhancement and Species Recovery Grant applications based on the following:

- Soundness of the project design, work plan or plan of study;
- Promotion of the goals and objectives of the Board's Strategic Plan;
- The need for the proposed project;
- The need for financial assistance; and
- Financial, technical, or administrative participation or coordination by all affected local governmental or other entities (in-kind or cost-share funding).

NOTE: Recognizing that future needs and responses to those needs cannot be predicted with certainty, the Colorado Water Conservation Board reserves the right to recommend for funding any design plan, engineering, or construction project that

it determines would: (1) address the fish and wildlife impacts from the construction of water diversion, delivery, and storage facilities that require a permit, license, or other approval from the United States; or (2) respond to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973",16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

Approved by the CWCB
Date May 17, 2011
Agenda Item 10