



COLORADO
**Colorado Water
Conservation Board**
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Cole Bedford, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: November 16-17, 2022 Board Meeting

AGENDA ITEM: CA 3. Updated Water Projects Loan Program Guidance

Staff Recommendation

Staff recommends the Board approve the adoption of the “Water Project Loan Program Guidance for Potential and Current Borrowers” as updated in October 2022. The new document will replace the “Water Project Loan Program Guidelines”, which was last revised in January 2006. The new document does not represent a change to the Water Project Loan Program’s policies or practices, but only expands upon, clarifies, and updates the old Guidelines. The Guidance document is intended to be used as a reference for borrowers in conjunction with communications with Water Project Loan Program staff.

Background

The Water Project Loan Program (Loan Program) provides \$50 million dollars in low-interest loans every year for water projects across Colorado. Organizations that borrow from the Loan Program include water and sanitation districts, irrigation districts, irrigation companies, municipalities, and water users associations. However, the leadership of these types of organizations are often more familiar with financing through commercial banks or the federal government, which operate differently than the Loan Program. To provide clarity for borrowers, staff has maintained a guidance document with concise descriptions of the Loan Program’s requirements, limitations, and opportunities. The most recent version of this document, titled “Water Project Loan Program Guidelines” was revised in January 2006. Although the Loan Program has not significantly changed its operations since that time, it was recognized that an update was necessary to expand upon and clarify the decade-and-a-half old document. The new document is titled “Water Project Loan Program Guidance for Potential and Current Borrowers” and was updated in October 2022.

Attachments:

Water Project Loan Program Guidance for Potential and Current Borrowers - Updated October 2022

Water Project Loan Program Guidelines - Revised January 2006





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WATER PROJECT LOAN PROGRAM

GUIDANCE FOR POTENTIAL AND CURRENT BORROWERS

October 2022

The Water Project Loan Program

The Colorado Water Conservation Board (CWCB) Water Project Loan Program provides low-interest loans for the design and construction of untreated projects in Colorado. This includes agricultural and municipal water collection, storage, and delivery facilities, as well as hydroelectric power generation, but does not include water treatment. Approximately \$50 million is available annually for these purposes with a minimum recommended loan request of \$100,000.

Additional information pertaining to the Water Project Loan Program is available on the CWCB website at: <https://cwcb.colorado.gov/funding/water-project-loan-program>

Use of this Document

The purpose of this document is to describe the process for receiving a loan through the Water Project Loan Program and how a loan is managed during construction and loan repayment.

This document is divided into two sections: *Part I: Application and Contracting* and *Part II: Construction and Repayment*. Part I covers eligibility for loans, the application process including loan feasibility study requirements, and the contracting process. Part II covers the loan management including borrower responsibilities during construction and the loan repayment period.

Contents

PART I: APPLICATION AND CONTRACTING

Eligibility	5
Eligible Entities.....	5
Eligible Projects	5
Eligible Expenses	5
Loan Costs	6
Application.....	7
Timing.....	7
Application Portal	8
Staff Review and Recommendation	15
Board Approval	15
Contracting	16
Collateral.....	17
Term and Interest Rate	17
Project Performance Period.....	17

PART II: CONSTRUCTION AND REPAYMENT

Construction	19
Design and Pre-Construction	19
Construction Administration.....	20
Repayment.....	22
Total Funds Disbursed	22
Loan Service Fee and Interest During Construction (IDC).....	22
Long Term Repayment	22
Delinquency	23
Loan Close Out.....	23

PART I

APPLICATION AND CONTRACTING

Eligibility

Eligible Entities

Public and private entities that can contract with the State (as determined by an attorney or bond counsel opinion), can establish and document the need for a project, and can be deemed creditworthy are eligible entities. Common borrowers include municipalities, special districts, water activity enterprises, irrigation districts, mutual ditch companies, associations, and reservoir companies. Non-governmental borrowers must be in good standing with the Colorado Secretary of State. Potential borrowers must also meet minimum insurance requirements for general liability, automobile and worker's compensation.

Eligible Projects

Eligible projects include work related to new construction or rehabilitation of existing untreated water collection, storage and delivery facilities such as:

- Reservoirs
- Ditch and canal infrastructure
- Pipelines
- Groundwater wells
- Water rights purchases
- Flood control
- Hydropower generation

Projects involving water treatment are not eligible for funding through the Water Project Loan Program.

Eligible Expenses

Typical expenses eligible for reimbursement include costs related to design, engineering, construction activities, and water rights purchases. They can also include reasonable costs incurred prior to the contract execution date if described in the project description and approved by staff prior to CWCB Board recommendation. Costs for land or easement purchase may be eligible if integral to the purpose of the project. Ineligible expenses include costs related to Water Court, Operations and Maintenance (O&M), and loan contract administration are NOT eligible.

Loan Costs

In addition to the loan principal, borrowers should be aware of the following costs:

- Interest
 - Interest During Construction (IDC)

Interest on funds disbursed to the borrower begins to accrue at the interest rate approved by the CWCB Board as soon as the funds are disbursed. The interest accrued during construction will be due at the start of the loan repayment period.
 - Long-Term Interest Rate

After the construction period, interest accrues on the loan in accordance with a standard amortization schedule. The interest rate is determined during the staff review process.
- Service Fee

A one-time service fee of 1% on all funds disbursed to the borrower (i.e. \$1,000 per \$100,000) will be added to the loan principal at the start of the loan repayment period. This fee will be repaid over the life of the loan.
- Reserve Account

During the first 10 years of repayment, the borrower will be required to set aside 10% of an annual payment in a reserve account each year. The borrower will also be required to provide CWCB with annual reporting throughout the loan repayment period of the appropriate reserve account balance. This provides protection for the borrower and CWCB in case of non-payment.

More detail on these costs is provided in Section II.

Application

If all of the eligibility requirements described in the previous section are met, the first step to begin the application process is to contact the Water Project Loan Program Project Development Engineer.

Timing

Ensuring that a loan application is completed on time will help to ensure that the project itself is completed on time. The loan application steps are:

1. CWCB contact
2. Loan Feasibility Study/Application Preparation
3. Staff Review
4. Board Review
5. Notice of Board Action (application approval or denial)

The timing and schedule of loan applications differ depending on whether the requested loan is more or less than \$10 million. For loans under \$10 million, applicants are encouraged to contact the Project Development Engineer as soon as they believe their project may utilize the loan program, however at the very least this should be done six months prior to the intended construction start date. Making first contact more than a year in advance of the intended construction start date is not uncommon. For loans over \$10 million, the Project Development Engineer should be contacted early in the year that the applicant intends to apply.

Loans under \$10 Million

The Colorado Water Conservation Board has authority to approve loans under \$10 million dollars at any of their six board meetings each year. An application package for loans must be submitted by the first of the month preceding the board meeting to be reviewed. In some cases, Staff may require extra information and review time such that the next board meeting date cannot be met. In these cases, the Board consideration may be delayed. If an application package is not received by the dates shown below, it will not be reviewed by the Board until the following board meeting. Upcoming board meeting dates can be found on the CWCB website.

Loan Feasibility Study/Application Submission Deadline ¹	Board Meeting Month
December 1	January
February 1	March
April 1	May
June 1	July
August 1	September
October 1	November

1. If the first of the month falls on a weekend or holiday, the application submission deadline will be the first following business day.

Loans over \$10 Million

The deadline for applications for loans greater than \$10 million dollars is August 1 in order to receive funds by the following July. The CWCB Board approves the funding at the November board meeting. Once approved by the CWCB Board, the loan needs to be approved by the legislature as part of the Projects Bill which typically occurs the following spring.

Application Portal

Applicants will need to register an account on the CWCB Portal in order to submit a loan application at <https://cwcb.force.com/s/registration-request>. It may take 1-2 days for the registration to be approved, and a notification of approval will be sent via email. Once the registration has been approved you can log on to the CWCB Portal and apply at <https://cwcb.force.com/s/login/>. The online application requires an Applicant Summary, Financial Reports, and a Loan Feasibility Study.

Applicant Summary

The Applicant Summary describes the loan's most pertinent information. It includes Borrower information, contact information, project information, and project costs.

Financial Reports

In order to assess the financial position of the Borrower, the applicant will be required to submit their most recent three years of financial reports. In some cases, Staff may request additional years of reports to support their review.

Loan Feasibility Study

A Loan Feasibility Study is a substantial technical report prepared by an engineer, consultant, and/or the borrower that establishes and documents:

1. The need for the project.
2. The technical, economic, institutional and financial feasibility of the project.
3. The social and environmental impacts of the project.

A Loan Feasibility Study differs from a reconnaissance-level planning study, which is a broad conceptual overview of a wide range of options and possibilities. The Loan Feasibility Study focuses in more specific detail on a limited number of project alternatives. The Loan Feasibility Study may be a significant undertaking unto itself for some entities. To help defer the cost of studies for storage projects the Water Project Loan Program has available Loan Feasibility Study Grants. For more information regarding these grants, Borrowers should contact the Project Development Engineer.

The Loan Feasibility Study elements will vary from project to project, but must include:

1. Background
2. Borrower Information
3. Water Rights
4. Project description including analysis of alternatives and selected alternative

5. Financial Feasibility Analysis
6. Conclusions and Recommendation

An outline of the elements of a Loan Feasibility Study are described below. Requirements may vary depending upon the scope and objective of each study. The borrower and their consultant are encouraged to discuss study requirements with the Project Development Engineer prior to development of a study plan. Examples of completed studies for various types of projects are available at the Water Project Loan webpage.

1.0 Background

1.1 Purpose

This section provides a brief overview of the project, including the type of project and amount of loan funding being requested, and a statement of what the project and study is intended to accomplish. It should describe the need for the project, the problems and opportunities to be addressed, the expectations of the study participants, and why the project is important to the borrower. It should also discuss relevant project history, and identify any regulatory compliance issues that are being addressed, such as dam safety, water quality and flood control.

1.2 Study Area Description

The study area/service area is generally the geographic area to be served by the proposed project. The study area description should include the following items:

A narrative description of the study area to include the county, the location of towns or cities, topography, and locations of major streams. A study area map showing each of the items above, as well as the locations of existing facilities, proposed project facilities and boundaries of lands to be served. Socio-economic characteristics of the study area such as population, employment and land use. For irrigation projects, the tabulation should provide a description of cropping patterns and crop yields on existing agricultural lands.

1.3 Previous Studies

To the maximum extent possible, the results of any previous studies and investigation should be utilized for the current Loan Feasibility Study. If the Loan Feasibility Study was preceded by a reconnaissance-level study, the results of the reconnaissance study should be summarized.

2.0 Borrower Information

2.1 Description

Each Loan Feasibility Study should include a description of the entity (municipality, irrigation district, conservancy district, ditch company, etc.) that is sponsoring the proposed project. The project sponsor may be a public or private entity. The description should include the following:

- Type of organization, official name, the year formed, and the statutes under which the entity was formed. For private entities, a copy of the Articles of Incorporation and By-laws should be appended to the report.
- For public entities, the number of customers, taps, etc. served, and current water usage, and

future growth plans.

- For private entities, the number of members or shareholders and shares of stock outstanding or a description of other means of ownership, and current water delivery
- A brief history of the sponsoring entity.
- Identification of revenue sources (existing service charges, tap fees, share assessments, etc.).
- A description of existing water supply facilities owned and/or operated by the entity.

3.0 Water Rights

3.1 Water Availability

The Loan Feasibility Study should provide a detailed description and analysis of each water supply source to be utilized by the proposed project. (A brief description of existing sources may be adequate for projects that involve only rehabilitation of existing facilities). Each source of supply should be described in terms of location, yield, extent of development, and water rights status. Maps and schematic diagrams should be included as a part of the description.

For surface water sources, the description should include a numerical and graphical tabulation of annual flows and average monthly flows for the period of record on each stream. For groundwater sources, the source aquifer(s) and the expected yields and reliability of wells should be identified. A complete tabulation of water rights for each surface water source should also be provided to include appropriation dates, adjudication dates, status of adjudication (absolute or conditional), and amounts decreed to direct flow or to storage. For groundwater sources, the status of well permits and history of use should be provided.

For new water supply facilities or the expansion of existing facilities, an analysis of the expected yield of water supply sources should be included in the Loan Feasibility Study. The analysis should be performed in such a way as to take into account a reasonable range of variations in flow due to hydrologic and meteorological conditions as well as the operation of the water rights priority system.

3.2 Water Supply Demands

Existing and future water demands are analyzed, as well as the adequacy of water rights/existing yields, and water demand and availability are compared. Study area water demands are generally estimated for a selected planning horizon or period of time. Typically, a planning horizon should be at least as long as the CWC loan period. Demands are estimated for the study planning horizon and compared with the yields of existing supplies. If the comparison indicates a water supply deficit at some point during the planning horizon, alternatives are formulated to meet the deficit by reducing demands or increasing supplies, or both. Alternatives are then formulated to supply water to the project service area under varying degrees of reliability.

4.0 Project Description - Analysis of Alternatives & Selected Alternative

This section further documents the project need by assessing existing and future conditions, identifying problems and deficiencies, and formulating and evaluating potential solutions.

4.1 Analysis of Alternatives

Each study should include the formulation and evaluation of a reasonable number of alternatives for accomplishing the study objective(s). The number of alternatives will depend upon the objective and scope of the Loan Feasibility Study. Generally a minimum of three alternatives should be presented, one of which should be the “no-action alternative.” Each alternative should be described in terms of its various components (both structural and non-structural) and the manner in which the proposed facility will operate. Examples of non-structural elements are improvements in the management of developed water supplies, water transfers from existing to new uses and new or revised institutional arrangements.

- Evaluation Factors - Alternatives should be evaluated to distinguish the differences between them, in accordance with evaluation factors suggested below:
 - Outputs/yields - Project outputs are typically expressed in terms of acre-feet of water supply or in units of energy for hydropower. For municipal water supply projects, the estimated safe annual yield of the project should be given. The safe annual yield is the amount of water the project is expected to yield during each year of a critical dry period. For irrigation projects, the yield should be expressed in terms of acre-feet of water supplied to the project service area on an annual basis. The degree of reliability or firmness of a particular yield should also be given. For projects that involve the rehabilitation of existing facilities, the yield should be expressed as the incremental difference in water supply with and without the project.
 - Costs (capital, operations and maintenance (O & M), total annual costs and costs per unit)
 - A cost comparison should be made between alternatives. The cost analyses should consist of: (1) an estimate of total capital costs and total annual (O & M) and replacement costs for each alternative, and (2) a total annual cost for each alternative calculated by adding O & M to amortized capital costs, and (3) a cost per unit of project output, i.e. annual project cost per acre-foot of water delivered.
- Impacts - Identifies and compares potential impacts to the man-made environment and the natural environment:
 - Impacts on the man-made environment - residential or commercial buildings affected; utility relocations; acreages of developed lands impacted; historical and archaeological sites impacted; impacts on outdoor recreation activities.
 - Impacts on the natural environment - acres of forest, grasslands, etc. to be impacted; streamflow impacts; water quality impacts; impacts on vegetation, aquatic wildlife and terrestrial wildlife; threatened and endangered species in the project area; impacts to federal land national forests, wilderness areas or other areas.
- Economic analysis and feasibility - The level of economic analysis will vary from project to project, but generally will include an assessment of benefits and costs. An estimate of the number of shareholders, members, households, etc., expected to benefit from the project should be provided.
- Institutional requirements - Identify and evaluate permits, court actions, contracts, agreements, etc. that are required for project implementation.
- Special considerations - These are extraordinary situations likely to be encountered during design and/or construction. They may relate to special technical considerations, the need for further investigations, uncertainty or risk associated with demand projections or cost estimates, or the possibility of new technologies affecting project.

The results of the alternatives evaluation should be described and displayed in such a manner that the differences between alternatives are apparent. The report should identify the differences between alternatives and comparative costs, and should describe the process (evaluation methodology) used in selecting one of the alternatives as the preferred plan.

4.2 Selected Alternative

A detailed description of the *Selected Alternative* should be provided and should include the following:

- Project Description - A narrative description of project components and operation to indicate how the entire project will function.
- Map - A map of the entire project area showing the locations of existing and proposed project components, and other features like floodplains, spillway inundation zones, etc.
- Conceptual Plan/Cross-Section - Profiles and cross-sections for each major structure to include dimensions and hydraulic properties. Profile and typical sections for canals and pipelines with water surface and hydraulic gradeline elevations.
- Conceptual Design Features - Hydraulic, hydrologic, and structural design criteria for all proposed facilities including:
 - Sizing criteria for all hydraulic features such as reservoirs, outlet works, canals, pipelines, pumping plants, etc. with associated energy losses where appropriate.
 - Preliminary structural design criteria including loadings, stresses, geotechnical considerations, and assumptions used for stability analyses.
 - Derivation of the reservoir inflow design flood with volume, peak discharge and routing through the reservoir.
 - Spillway sizing for the inflow design flood.
 - The number, size and operating characteristics of pumping units.
 - Other site factors such as erosion hazard, icing and cold-weather conditions, special construction requirements, and sedimentation.
- Field Investigations - A description of all field investigations including the date of the investigations, type of investigations, methodology used and results. For all major structures, the Loan Feasibility Study should describe site conditions, engineering geology, geologic mapping, source and availability of construction materials, and subsurface investigations used in the design of the structure. Where geologic conditions are poor or may require intensive exploration and evaluation, a comprehensive report by a qualified engineering geologist may be necessary.
- Right-of-Way/Land - Land and right-of-way requirements for the proposed project and a tabulation of land ownership at the site of proposed facilities.

4.3 Cost Estimate

Provide a detailed estimate for all capital costs of project implementation such as planning and permitting activities, engineering design, construction inspection, administrative and legal costs, land and right-of-way acquisition, relocation costs, construction costs, financing costs and an appropriate contingency factor. Detailed construction cost estimates should include a tabulation of quantities, unit costs and total costs. Allowance should be made for cost escalation expected between the date of the construction cost estimate and the award of the construction contract. For large projects with multi-year construction schedules, cost escalation during construction should also be estimated.

4.4 Implementation Schedule

Provide a project implementation schedule showing the beginning and completion dates for all activities required for project implementation such as planning studies, permits, design, contracts, land and right-of-way acquisition, financing, and construction.

4.5 Impacts

Include consideration of the impact of the proposed project on local and/or regional plans for water resource development, land use, recreation, water quality management, economic development, and other social and environmental effects.

4.6 Institutional Feasibility

Address institutional considerations such as actions or proceedings that must be undertaken to obtain compliance from governmental agencies, or other parties involved in design, construction and financing, to allow project implementation. They include permits, court actions, contracts, agreements, other agency approvals, etc. Coordination on the project may be required with other Department of Natural Resources Departments such as Division of Wildlife and Division of Parks.

The U.S. Corps of Engineers 404 (Dredge and Fill) Permit is generally the key approval for water diversion and storage projects. The 404 permit may trigger the U.S. Environmental Protection Agency - National Environmental Policy Act (NEPA) process, which can require an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) for smaller projects.

Other typical federal, state, and local permits that could be encountered are:

- U.S. Forest Service - special use permit
- U.S. Fish and Wildlife - endangered species consultation
- U.S. Bureau of Reclamation - right-of-way/permit, lease, license agreement, easement, carriage contract, etc.
- State Division of Water Resources - well permits, engineering plan approval
- State Water Quality Control Division - water quality
- County Commissioner approval - conditional or special use, HB 1041 activities of "state interest"

5.0 Financial Feasibility Analysis

This section documents the financial feasibility of the selected alternative. It provides a detailed financial program to describe financing arrangements and the sources and uses of funds for the proposed project. It provides an analysis of the project sponsor's ability to repay all existing and projected debt service, as well as normal operating expenses. This section includes:

- Loan Amount - Discuss total project costs, the amount of CWCB loan requested, and the term and interest rate expected.
- Financing Sources - Identify sources of funding for the project. Describe each method of financing to be utilized, such as CWCB loan, loans from other agencies, bonds, etc.
- Revenue and Expenditure Projections - Include a detailed schedule of estimated annual revenues and annual expenditures for the entire period of debt retirement. Annual revenues should be estimated and displayed for each source of funds (assessments, water sales, property taxes, etc.). Annual expenditures should be displayed for debt retirement payments to each category of debt, for operation and maintenance costs, and for payments to reserve funds. For CWCB loans, borrowers are required to accumulate the equivalent of one annual

loan payment in a loan reserve fund, over the first 10 years of loan repayment. (i.e. place in reserve 10% of the annual loan payment for each of the first 10 years of the loan.)

- Loan Repayment Sources - Describe sources of funds for loan repayment, such as assessments, water sales, property taxes and grants. Discuss current water rates/ assessments/fees. Feasibility studies for projects with a hydropower component should include an assessment of the potential market for the hydropower.
- Financial Impacts - Discuss financial impacts of the project on total debt, water rates, assessments of users, and property taxes. Determine future rates needed to cover CWCB loan obligations and additional operating costs. Discuss savings or new revenues generated.
- TABOR (Taxpayer's Bill of Rights) Issues - Provide a full discussion of TABOR issues, particularly regarding the ability to incur multi-year debt, and limits on increased tax revenues and spending. An election may be required for public entities not having the status of a qualified enterprise. The provisions of TABOR are complex and may require an attorney and/or accountant opinion.
- Collateral - Discuss specifics of the loan collateral or security being offered by the borrower (in accordance with CWCB Policies) to assure repayment of the CWCB loan. The type of collateral will vary based on the type of organization, and typically may include a pledge of revenues/assessments, project facilities/water rights, or real property. If real property is offered as collateral, the applicant will be required to submit supporting documentation of land values, based on current land use and including improvements financed by the CWCB, from a Colorado Certified General Appraiser. If water rights are being purchased or offered as collateral, the applicant will be required to submit a written appraisal or opinion of value from a qualified water rights appraiser supporting the purchase price and value.
- Sponsor Creditworthiness - Provide information to be used by staff to evaluate creditworthiness and financial need (in accordance with CWCB Policies) as follows:
 - Current schedule of rates or assessments.
 - Copies of the three most recent audit reports of financial statements.
 - A current credit report, if requested.

6.0 Conclusions and Recommendation

Provide a summary of study conclusions, and an opinion and recommendation as to the overall feasibility of the project and the feasibility of loan repayment.

Staff Review and Recommendation

Once a Loan Application Package has been completed with the information described in the preceding sections it can be submitted via the CWCB Grants and Loans Portal. The CWCB Grants and Loans Portal can be accessed at: <https://cwcb.force.com/>

The applicant will be assigned a Loan Project Manager who will review the application. The assigned Loan Project Manager will contact the borrower, notifying the borrower that they are reviewing their application. The Loan Project Manager will likely request additional information to supplement the borrower's application and will work with the borrower to schedule a visit to the project site. They will use this information to prepare a memorandum to the Board which will be the basis of the CWCB Board's decision to approve or deny the loan request.

Board Approval

The Loan Project Manager will confirm with the borrower the date of the upcoming Board meeting and invite the borrower to attend so that they can address the board directly if interested. They will make a recommendation to the Board which the Board will take action on. If approved, the loan application process will be complete for projects under \$10 million. The borrower will receive formal notice via email of the approval and the contracting process will begin. If the loan is not approved, further review may be required which will be confirmed with the Loan Project Manager.

For loans more than \$10 million dollars, the contracting process may begin after Board approval, but funds may not be disbursed until after July 1 and the Projects Bill has been passed by the General Assembly and signed by the Governor.

Contracting

After board approval, the borrower will be contacted by the Contracts Manager to begin the process of preparing the loan contract. Preparing the loan contract requires ongoing communication between CWCB staff and the Borrower. This contract will detail the exact legal obligations of the Water Project Loan Program and the Borrower with respect to the loan. Some Borrowers may wish to review the contract with their attorney. It will need to be signed by all parties (Borrower, CWCB Finance Section Chief, and State Controller or authorized delegate) before any loan funds can be disbursed. This process usually takes about one to three months.

Though this section highlights some important documents in the loan contract, the borrower should be well acquainted with the details of their specific contract as well. The contract documents typically include:

- Loan Contract - contains all of the terms for the loan such as the borrower, loan amount, interest rate, etc.
- Project Summary - contains the project specific information about the loan such as the project description, approval and authority, procedures and allowed expenses, etc.
- Promissory Note - evidence of the borrower's obligation to repay the total loan amount
- Security Agreement - to secure the borrower's pledged revenues for the purpose of repaying the loan
- Deed of Trust - If the loan security includes physical property, the Deed of Trust conveys the pledged property to the County's Public Trustee until payment, in full, of the indebtedness

Additionally several documents must be provided by the borrower in order to complete the contract. These include:

- W-9 - currently only the State W-9 is accepted. The Contracts Manager can provide the form if the borrower does not have one readily available
- Evidence of Insurance - only for non-governmental borrowers, must be an Acord 25 form. Liability insurance up to \$1 million must be maintained by the borrower for the entire repayment period.
- Completed Electronic Transfer Form and voided check of bank letter - The EFT form can be found on the Water Project Loan Program webpage.
- Resolutions— Board of Director's is required, a vote of the shareholders only if required by the borrower's by-laws. The resolution must state that the borrower's governing body has validly adopted a resolution approving the loan. It must include the date and location that the vote took place.
- Attorney Opinion Letter (or Bond Counsel Opinion)

The contract describes the mutual obligation of the Parties and the Parties' respective performances of the project under the contract. Once executed, the contract allows the Borrower to proceed with the project in accordance with the terms and conditions of the contract. A sample contract can be found on the Water Project Loan Program webpage.

Collateral

All Water Project Loan Program loans require that security be pledged against default. This security may take several different forms depending on the borrower and their assets. The security pledged for the loan will be established during the application phase, but will be formalized in the contract.

Term and Interest Rate

The standard term for a Water Project Loan Program loan is 30 years. However, 40-, 20-, and 10-year terms can also be considered upon request. 20-year terms are eligible for a reduction in the interest rate and 40-year terms will be increased by an amount determined by staff.

For projects undertaken to address a fill restriction on a reservoir, an interest rate reduction may be available. Contact the Project Development Engineer for more information.

Interest rates are updated every other month based upon the weighted A-rated municipal bond rate for the preceding six-month period. The rate offered to a borrower is based upon their status as an agricultural, low-income municipal, middle-income municipal, high-income municipal, commercial, or hydroelectric borrower. In the case that a borrower is comprised of various entities of differing statuses, a “blended” rate will be developed based upon their percent stake in the borrower.

Current interest rates are available on the Water Project Loan Program webpage.

Project Performance Period

The contract will specify a Project Performance Period, which is the period within which the project must be completed. The beginning date of this period is the date the contract is executed and the project end date is typically three to five years later. The Project Performance Period does not include the full repayment period of the loan contract. Funds may only be disbursed within the Project Performance Period and the loan must be substantially completed before the period expires. In some cases an extension to the Project Performance Period may be granted if reasonable progress is made on the project, but unforeseen circumstances prevent its on-time completion.

PART II

CONSTRUCTION AND REPAYMENT

Construction

After all of the contract documents have been signed by both the borrower and the State, the construction phase—which includes design, pre-construction, and construction activities—will begin. The Water Project Loan Program construction requirements must be followed to ensure project expenses are eligible for reimbursement. These requirements are standard for most construction projects implemented by government entities, but may be unfamiliar to smaller or private entities. These requirements include:

- Construction Plans and Specifications are prepared and stamped by a licensed Professional Engineer
- A Contractor is selected as part of a competitive bid process
- A formal construction contract is prepared outlining the responsibilities of the borrower and the Contractor on the project (mention payment & performance bond requirement?)
- A formal Notice of Award and Notice to Proceed is provided to the Contractor
- A pre-construction meeting attended by the Project Manager takes place before work begins
- The Contractor, sub-Contractors, and/or other vendor prepares invoices detailing the work eligible for reimbursement (these will be submitted with the pay requests)
- CWCB Project Manager will provide the borrower a letter template that is submitted with each pay request for loan disbursement (discussed further in Pay Request and Loan Fund Disbursals section below)
- Borrower signs the pay request letter as indication of approval of all attached Contractor invoices and submits request to Project Manager.

It is critical that the construction process requirements described in this section are understood by the borrower so that all expenses incurred on the Project are eligible for reimbursement.

Design and Pre-Construction

Design activities may inform the Feasibility Study preparation as part of the loan application process. It is common that expenses related to design are incurred before the loan contract receives State signature. These expenses may be eligible for reimbursement if they are documented with invoices and completed by licensed professionals.

Design Plans and Specifications

Both a technical engineering planset and a technical specifications manual must be prepared for the project and provided to the Loan Project Manager. These plans and specifications should be prepared and stamped by a professional engineer. Both documents should be provided to the Loan Project Manager before construction work begins. Expenses related to the development of the plans and specifications may be reimbursed.

Contractor Selection

The on-site construction work of all projects receiving loan funds should be undertaken by a contractor hired by the borrower. Work undertaken by the borrower themselves is not typically eligible for reimbursement. Contractor selection must be competitive. The selected contractor is determined by the borrower and their engineer with the consent of CWCB. If the borrower is not familiar with the competitive bid process, the Loan Project Manager may provide direction. After the bid process is complete and a contractor is selected, the borrower should issue a Notice of Award followed by a Notice to Proceed. Both documents should be provided to the Loan Project Manager. Once on-site construction is ready to begin, a pre-construction conference will be held and attended by the borrower, the contractor, the engineer, the Loan Project Manager, and any other project stakeholders as necessary.

Construction Administration

The construction phase is the on-the-ground implementation of the project. During this phase the contractor will commence the work for which the loan is intended to pay. The primary concern of the borrower with respect to the loan during this time will be with preparing Loan Pay Requests and receiving Loan Fund Disbursals as well as keeping the Loan Project Manager apprised of the project's progress. The Loan Project Manager will coordinate with the borrower to monitor expenditures and will regularly attend construction progress meetings.

Pay Requests and Loan Fund Disbursals

In order to receive loan funds, Loan Pay Requests are prepared and signed by the borrower throughout the Project and submitted to the Loan Project Manager who will review the request.

Loan Pay Requests consist of a cover sheet and the supporting invoices. A copy of the pay request cover sheet will be provided by staff. Pay Requests must be accompanied by Contractor and/or Vendor invoices describing the work being paid for. The payment process includes:

1. The Contractor and/or other vendors will complete a portion of the work
2. Contractor and/or other vendors will submit an invoice or invoices to the borrower
3. The borrower will prepare, approve and sign the Loan Pay Request, including all supporting invoices and submit the request to the Loan Project Manager
4. The Loan Project Manager will review the Loan Pay Request and either authorize the disbursement or request additional information
5. The borrower will be notified via email when the payment has been authorized
6. Loan funds in the amount of the request will be disbursed by electronic transfer to the borrower

This process is repeated and funds are disbursed throughout the Project, often monthly, but may vary from one project to the next.

Loan Increases

If in the course of the work, it becomes clear that the authorized loan amount is not sufficient to cover the cost of the project, an increase to the loan can be made pending Board approval. If a loan increase is necessary, it must be formally requested and justified in a letter addressed

to the Loan Project Manager. The CWCB Board will formally hear the borrower's request at the next Board meeting. If the loan increase request is approved, funds may be made available for disbursement typically after about two months.

Project Time Extension

The Project Performance Period for most loans is three to five years as specified in the loan contract. If it becomes clear that the project will not be completed within the period, an extension must be formally requested and justified in a letter addressed to the Loan Project Manager. Staff may authorize the extension of the project window without Board review, however, Board review may be required in some cases.

Substantial Completion

When the Project is complete, a final site visit by the Loan Project Manager will be scheduled. The Loan Project Manager will confirm with the borrower and engineer that the Project is substantially complete and will request as-built drawings. The Loan Project Manager will work with the borrower to determine the loan's substantial completion date and when the repayment period will begin. They will then issue a formal substantial completion letter notifying the borrower of that the loan is going into repayment as well as the terms of the repayment.

Repayment

Once a project is substantially complete, the repayment period begins. The requirements of repayment are outlined in a “substantial completion letter” sent via email.

The substantial completion letter includes the substantial completion date, interest during construction amount due, whether that interest is rolled into the loan or due at that time, the total amount of project cost, the amount of the 1% fee, the 1st due date of repayment, and the annual payment amount.

Total Funds Disbursed

If a project is completed without utilizing the entire loan amount, then an adjustment to the contract reflecting the actual borrowed amount will occur. This adjustment will not reduce the annual payments stipulated in the contract, but will effectively shorten the term of repayment.

If the borrower wants to change the annual payment amount—reduce annual payments and maintain the term of repayment—then an additional contract amendment is required.

Once the contract amendment(s) is completed, the borrower will receive an updated promissory note with amended annual payment amount and term. If no changes to the payment amount are made then the final promissory note will be issued with the substantial completion letter.

Loan Service Fee and Interest During Construction (IDC)

A loan service fee of 1% of the loan cost is assessed on all loans. This fee is rolled into the principal loan amount.

Interest on the Borrower’s loan will accrue during the period of project construction. This “Interest During Construction” or IDC is due within 30 days of the substantial completion notification.

The IDC may be rolled into the loan and repaid over time if there is room to accommodate this within the contracted loan amount. If this option is selected then it would be outlined in the substantial completion letter and would not be due immediately but would be financed and amortized over the life of the loan.

Long Term Repayment

The borrower will not hear anything further about repayment from CWCB until 45 days before the borrower’s 1st annual payment is due. The borrower will be sent a “loan reminder letter” that outlines the details of the payment and will include the contract number, payment amount, due date and options for how to make the payment.

There are three options for how the loan payment can be made: mail a check, electronic funds transfer, and online with a credit card or electronic check. Along with the annual payment, CWCB also requires:

- Municipalities: Audited Annual Financial Statements
- Non-Municipalities: Certificate of Insurance and Statement of Reserve Balance

After the payment is received and processed by CWCB's Finance Manager the borrower will receive a "receipt letter" and an updated amortization schedule.

In addition to the annual payment, each year for the first 10 years the borrower will be required to set aside an additional 10% of an annual payment as a reserve balance. This amount will provide an additional security against default on an annual payment. If all other payments are made, this reserve balance will be used for the last annual payment at the end of the loan term.

This process will repeat every year at the scheduled time until the loan is paid in full. There is no penalty for early payments and principal only payments can be made at any time for any amount.

Delinquency

In the event of delinquency, staff will send a reminder letter to the borrower every 30 days. A late fee of 5% of the current annual payment may be assessed for loan payments not received within 60 days of the due date. If an annual payment is 180 days or more past due a staff review of the loan will take place. The review includes an examination of the payment history, extenuating circumstances and reasons for non-payment, and consideration of next steps.

Requests for payment deferral will be considered. Upon request for deferral of a payment, Staff will prepare a memo to the Board which includes the reasons for the deferral request and a Staff recommendation.

Loan Close Out

When the loan is paid in full, the borrower's security will be released and the borrower will receive paperwork releasing the loan.

Colorado Water Conservation Board

CONSTRUCTION FUND
AND
SEVERANCE TAX TRUST FUND
PERPETUAL BASE ACCOUNT

WATER PROJECT LOAN PROGRAM GUIDELINES



Colorado Water Conservation Board
Department of Natural Resources

Revised January 2006

WATER PROJECT LOAN PROGRAM - GUIDELINES

1.0 Introduction

- 1.1 Use of Guidelines**
- 1.2 Steps to Obtain a CWCB Loan**
- 1.3 Loan Feasibility Study - Overview**

2.0 Loan Feasibility Study – Outline

- 2.1 Background**
- 2.2 Project Sponsor**
- 2.3 Water Rights**
- 2.4 Project Description – Analysis of Alternatives & Selected Alternative**
- 2.5 Financial Feasibility Analysis**
- 2.6 Conclusions and Recommendation**
- 2.7 Loan Request Submittals**

1.0 Introduction

1.1 Use of Guidelines

These Guidelines for the CWCB Water Project Loan Program provide an overview of steps for obtaining a CWCB loan, including preparation of the Loan Feasibility Study. They are based upon generally accepted practices for sound planning, design, and construction of water resource projects. The consulting firms or individuals responsible for the planning, design, and construction activities are expected to develop specific analytical procedures that are appropriate for a particular project analysis. The Guidelines have been written to assist the project sponsor and the consultant with the loan application process and with planning and implementing a cost-effective project for the maximum benefit to Colorado water users. Project sponsors and their consultants are encouraged to consult frequently with the CWCB staff during planning, design, and construction. The process and procedures outlined here are intended to be as flexible as possible and to be responsive to the needs of the project sponsor.

Adopted CWCB Policies and Procedures pertaining to the operation of the Water Project Loan Program are available on the CWCB website at www.cwcb.state.co.us. Loan applicants are encouraged to review these during the preparation of a loan request.

1.2 Steps to Obtain a CWCB Loan

The basic steps to follow to obtain a CWCB loan are as follows:

1. Staff Contact – The project sponsor should contact the CWCB staff to discuss the scope of the proposed project, the schedule, applicable interest rates, etc. The CWCB staff may meet with the applicant to discuss the Loan Feasibility Study and Loan Application process, and any planning or engineering work already completed or underway. Typically a field meeting will be set up to look at the proposed project site during the loan review process.
2. Loan Feasibility Study - The Loan Feasibility Study and Loan Application are submitted by the 1st day of the month preceding the month of the CWCB meeting. (i.e. February 1st for the March Board meeting.) Loans in excess of \$10,000,000 must be submitted by August 1st, for consideration at the November CWCB meeting. A Loan Feasibility Study is required for any funding request from the CWCB. Loan Feasibility Studies are generally conducted by consultants or consulting firms selected by the applicant, with the advice and assistance of the CWCB staff.
3. Loan Review Recommendation - The CWCB staff will review the completed Loan Feasibility Study and will make a recommendation to the Board regarding the feasibility of the project and the loan. The loan sponsor will be notified if changes are required in the submitted Loan Feasibility Study. Copies of the staff recommendation will be provided to the loan sponsor prior to the CWCB meeting.
4. CWCB Loan Authorization – CWCB staff will present the loan recommendation to the Board at their bi-monthly meetings. Loans in excess of \$10,000,000 are recommended for inclusion in the Construction Fund Bill introduced in January, with funding available the following July 1.
5. Contract Execution - Following Board approval, the project sponsor will be contacted by the CWCB Contracts Manager to begin the loan contracting process. No State funding can be provided until a signed State contract is in place.
6. Design and Construction – Following Board approval the project sponsor will also be contacted by the CWCB Design and Construction Manager to begin discussing the design and construction process. Items such as the following will be discussed:
 - a. Project Schedule, “Need Funding” Date, and Project Contacts
 - b. Design/Construction Process and Requirements/Bidding Procedures
 - c. Loan Disbursement Procedures
7. Loan Repayment – At the end of project construction, and following issuance of a Letter of Substantial Completion by the Design and Construction Manager, and payment of the Interest During Construction (IDC) owed, the project sponsor will begin making permanent annual loan payments.

This section provides a summary of the steps in obtaining a CWCB loan. Additional information is available on the CWCB website at www.cwcb.state.co.us.

1.3 Loan Feasibility Study - Overview

A Loan Feasibility Study is a technical report, prepared by an engineer, consultant, and/or project sponsor that establishes and documents the following:

- a. the need for the project;
- b. the technical, economic, institutional and financial feasibility of the project;
- c. the social and environmental impacts of the project

A Loan Feasibility Study differs from a reconnaissance-level planning study, which is a broad conceptual overview of a wide range of options, possibilities and opportunities. The Loan Feasibility Study focuses in more specific detail on a limited number of project alternatives.

The Loan Feasibility Study elements will vary from project to project, but generally will include the following:

- Purpose – A description of the need and purpose of the project.
- Sponsor – A description of the project sponsor including type of organization, service area, water facilities, revenue sources, existing rates, etc.
- Water Demands and Water Rights – A description of existing and future water demands, and the adequacy of water rights and the quality of water sources with respect to the intended use of the water.
- Analysis of Alternatives – A formulation and evaluation of potential alternatives for accomplishing the project sponsor's objective.
- Selected Alternative – A detailed description of the selected alternative, including a preliminary design and construction cost estimate, and a project schedule.
- Impacts – A description of project social and environmental impacts.
- Institutional Considerations – A summary of institutional considerations (such as permits, court actions, contracts, agreements, and other approvals) that are required for project implementation.
- Financial Plan – An analysis of project funding sources and the project sponsor's ability to repay all existing and projected debt service.

2.0 Loan Feasibility Study - Outline

The following paragraphs provide an outline for preparation of a CWCB Loan Feasibility Study. Requirements may vary depending upon the scope and objective of each study. The project sponsor and the consultant are encouraged to discuss study requirements with the CWCB staff prior to development of a study plan. Examples of completed studies for various types of projects are available on the CWCB website at www.cwcb.state.co.us.

2.1 Background

2.1.1 Purpose

This section provides a brief overview of the project, including the type of project and amount of loan funding being requested, and a statement of what the project and study is intended to accomplish. It should describe the need for the project, the problems and opportunities to be addressed, the expectations of the study participants, and why the project is important to the borrower. It should also discuss relevant project history, and identify any regulatory compliance issues that are being addressed, such as dam safety, water quality and flood control.

2.1.2 Study Area Description

The study area/service area is generally the geographic area to be served by the proposed project. The study area description should include the following items:

- a. A narrative description of the study area to include the county, the location of towns or cities, topography, and locations of major streams.
- b. A study area map showing each of the items above, as well as the locations of existing facilities, proposed project facilities and boundaries of lands to be served.
- c. Socio-economic characteristics of the study area such as population, employment and land use. For irrigation projects, the tabulation should provide a description of cropping patterns and crop yields on existing agricultural lands.

2.1.3 Previous Studies

To the maximum extent possible, the results of any previous studies and investigation should be utilized for the current Loan Feasibility Study. If the Loan Feasibility Study was preceded by a reconnaissance-level study, the results of the reconnaissance study should be summarized.

2.2 Project Sponsor

Each Loan Feasibility Study should include a description of the entity (municipality, irrigation district, conservancy district, ditch company, etc.) that is sponsoring the proposed project. The project sponsor may be a public or private entity. The description should include the following:

- a. Type of organization, official name, the year formed, and the statutes under which the entity was formed. For private entities, a copy of the Articles of Incorporation and By-laws should be appended to the report.
- b. For public entities, the number of customers, taps, etc. served, and current water usage, and future growth plans.
- c. For private entities, the number of members or shareholders and shares of stock outstanding or a description of other means of ownership, and current water delivery.
- d. A brief history of the sponsoring entity.
- e. Identification of revenue sources (existing service charges, tap fees, share assessments, etc.).
- f. A description of existing water supply facilities owned and/or operated by the entity.

2.3 Water Rights

2.3.1 Water Availability

The Loan Feasibility Study should provide a detailed description and analysis of each water supply source to be utilized by the proposed project. (A brief description of existing sources may be adequate for projects that involve only rehabilitation of existing facilities). Each source of supply should be described in terms of location, yield, extent of development, and water rights status. Maps and schematic diagrams should be included as a part of the description.

For surface water sources, the description should include a numerical and graphical tabulation of annual flows and average monthly flows for the period of record on each stream. For groundwater sources, the source aquifer(s) and the expected yields and reliability of wells should be identified. A complete tabulation of water rights for each surface water source should also be provided to include appropriation dates, adjudication dates, status of adjudication (absolute or conditional), and amounts decreed to direct flow or to storage. For groundwater sources, the status of well permits and history of use should be provided.

For new water supply facilities or the expansion of existing facilities, an analysis of the expected yield of water supply sources should be included in the Loan Feasibility Study. The analysis should be performed in such a way as to take into account a reasonable range of variations in flow due to hydrologic and meteorological conditions as well as the operation of the water rights priority system.

2.3.2 Water Supply Demands

Existing and future water demands are analyzed, as well as the adequacy of water rights/existing yields, and water demand and availability are compared. Study area water demands are generally estimated for a selected planning horizon or period of time. Typically, a planning horizon should be at least as long as the CWCB loan period. Demands are estimated for the study planning horizon and compared with the yields of existing supplies. If the comparison indicates a water supply deficit at some point during

the planning horizon, alternatives are formulated to meet the deficit by reducing demands or increasing supplies, or both. Alternatives are then formulated to supply water to the project service area under varying degrees of reliability.

2.4 Project Description - Analysis of Alternatives & Selected Alternative

This section further documents the project need by assessing existing and future conditions, identifying problems and deficiencies, and formulating and evaluating potential solutions.

2.4.1 Analysis of Alternatives

Each study should include the formulation and evaluation of a reasonable number of alternatives for accomplishing the study objective(s). The number of alternatives will depend upon the objective and scope of the Loan Feasibility Study. Generally a minimum of three alternatives should be presented, one of which should be the “no-action alternative.” Each alternative should be described in terms of its various components (both structural and non-structural) and the manner in which the proposed facility will operate. Examples of non-structural elements are improvements in the management of developed water supplies, water transfers from existing to new uses and new or revised institutional arrangements.

Evaluation Factors - Alternatives should be evaluated to distinguish the differences between them, in accordance with *evaluation factors* suggested below: Project evaluation factors typically used are as follows:

- a. Outputs/yields - Project outputs are typically expressed in terms of acre-feet of water supply or in units of energy for hydropower. For municipal water supply projects, the estimated safe annual yield of the project should be given. The safe annual yield is the amount of water the project is expected to yield during each year of a critical dry period. For irrigation projects, the yield should be expressed in terms of acre-feet of water supplied to the project service area on an annual basis. The degree of reliability or firmness of a particular yield should also be given. For projects that involve the rehabilitation of existing facilities, the yield should be expressed as the incremental difference in water supply with and without the project.
- b. Costs (capital, operations and maintenance (O & M), total annual costs and costs per unit) - A cost comparison should be made between alternatives. The cost analyses should consist of: (1) an estimate of total capital costs and total annual (O & M) and replacement costs for each alternative, and (2) a total annual cost for each alternative calculated by adding O & M to amortized capital costs, and (3) a cost per unit of project output, i.e. annual project cost per acre-foot of water delivered.
- c. Impacts – Identifies and compares potential impacts to the man-made environment and the natural environment:

- 1) impacts on the man-made environment – residential or commercial buildings affected; utility relocations; acreages of developed lands impacted; historical and archaeological sites impacted; impacts on outdoor recreation activities.
 - 2) impacts on the natural environment - acres of forest, grasslands, etc. to be impacted; streamflow impacts; water quality impacts; impacts on vegetation, aquatic wildlife and terrestrial wildlife; threatened and endangered species in the project area; impacts to federal land national forests, wilderness areas or other areas.
- d. Economic analysis and feasibility - The level of economic analysis will vary from project to project, but generally will include an assessment of benefits and costs. An estimate of the number of shareholders, members, households, etc., expected to benefit from the project should be provided.
 - e. Institutional requirements – Identify and evaluate permits, court actions, contracts, agreements, etc. that are required for project implementation.
 - f. Special considerations - These are extraordinary situations likely to be encountered during design and/or construction. They may relate to special technical considerations, the need for further investigations, uncertainty or risk associated with demand projections or cost estimates, or the possibility of new technologies affecting project.

The results of the alternatives evaluation should be described and displayed in such a manner that the differences between alternatives are apparent. The report should identify the differences between alternatives and comparative costs, and should describe the process (evaluation methodology) used in selecting one of the alternatives as the preferred plan.

2.4.2 Selected Alternative

A detailed description of the *Selected Alternative* should be provided and should include the following:

- a. Project Description – A narrative description of project components and operation to indicate how the entire project will function.
- b. Map - A map of the entire project area showing the locations of existing and proposed project components, and other features like floodplains, spillway inundation zones, etc.
- c. Conceptual Plan/Cross-Section - Layout and cross-sections for each major structure to include dimensions and hydraulic properties. Profile and typical sections for canals and pipelines with water surface and hydraulic gradeline elevations.

- d. Conceptual Design Features - Hydraulic, hydrologic, and structural design criteria for all proposed facilities including:
- Sizing criteria for all hydraulic features such as reservoirs, outlet works, canals, pipelines, pumping plants, etc. with associated energy losses where appropriate.
 - Preliminary structural design criteria including loadings, stresses, geotechnical considerations, and assumptions used for stability analyses.
 - Derivation of the reservoir inflow design flood with volume, peak discharge and routing through the reservoir.
 - Spillway sizing for the inflow design flood.
 - The number, size and operating characteristics of pumping units.
 - Other site factors such as erosion hazard, icing and cold-weather conditions, special construction requirements, and sedimentation.
- e. Field Investigations - A description of all field investigations including the date of the investigations, type of investigations, methodology used and results. For all major structures, the Loan Feasibility Study should describe site conditions, engineering geology, geologic mapping, source and availability of construction materials, and subsurface investigations used in the design of the structure. Where geologic conditions are poor or may require intensive exploration and evaluation, a comprehensive report by a qualified engineering geologist may be necessary.
- f. Right-of-Way/Land - Land and right-of-way requirements for the proposed project and a tabulation of land ownership at the site of proposed facilities.

2.4.3 Cost Estimate

Provide a detailed estimate for all capital costs of project implementation such as planning and permitting activities, engineering design, construction inspection, administrative and legal costs, land and right-of-way acquisition, relocation costs, construction costs, financing costs and an appropriate contingency factor. Detailed construction cost estimates should include a tabulation of quantities, unit costs and total costs. Allowance should be made for cost escalation expected between the date of the construction cost estimate and the award of the construction contract. For large projects with multi-year construction schedules, cost escalation during construction should also be estimated.

2.4.4 Implementation Schedule

Provide a project implementation schedule showing the beginning and completion dates for all activities required for project implementation such as planning studies, permits, design, contracts, land and right-of-way acquisition, financing, and construction.

2.4.5 Impacts

Provide plans for addressing impacts identified in Section 2.4.1.c. Also include consideration of the impact of the proposed project on local and/or regional plans for

water resource development, land use, recreation, water quality management, economic development, and other social and environmental effects.

2.4.6 Institutional Feasibility

Address institutional considerations such as actions or proceedings that must be undertaken to obtain compliance from governmental agencies, or other parties involved in design, construction and financing, to allow project implementation. They include permits, court actions, contracts, agreements, other agency approvals, etc. Coordination on the project may be required with other Department of Natural Resources Departments such as Division of Wildlife and Division of Parks.

The U.S. Corps of Engineers 404 (Dredge and Fill) Permit is generally the key approval for water diversion and storage projects. The 404 permit may trigger the U.S. Environmental Protection Agency - National Environmental Policy Act (NEPA) process, which can require an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) for smaller projects.

Other typical federal, state, and local permits that could be encountered are:

- U.S. Forest Service – special use permit
- U.S. Fish and Wildlife – endangered species consultation
- U.S. Bureau of Reclamation – right-of-way/permit, lease, license agreement, easement, carriage contract, etc.
- State Division of Water Resources – well permits, engineering plan approval
- State Water Quality Control Division – water quality
- County Commissioner approval - conditional or special use, HB 1041 activities of “state interest”

2.5 **Financial Feasibility Analysis**

This section documents the financial feasibility of the selected alternative. It provides a detailed financial program to describe financing arrangements and the sources and uses of funds for the proposed project. It provides an analysis of the project sponsor’s ability to repay all existing and projected debt service, as well as normal operating expenses. This section includes:

1. Loan Amount - Discuss total project costs, the amount of CWCB loan requested, and the term and interest rate sought.
2. Financing Sources – Identify sources of funding for the project, including how the local share will be provided. Describe each method of financing to be utilized, such as CWCB loan, loans from other agencies, bonds, etc.
3. Revenue and Expenditure Projections – Include a detailed schedule of estimated annual revenues and annual expenditures for the entire period of debt retirement. Annual revenues should be estimated and displayed for each source of funds (assessments, water sales, property taxes, etc.). Annual expenditures should be displayed for debt retirement payments to each category of debt, for operation and

maintenance costs, and for payments to reserve funds. For CWCB loans, borrowers are required to accumulate the equivalent of one annual loan payment in a loan reserve fund, over the first 10 years of loan repayment. (i.e. place in reserve 10% of the annual loan payment for each of the first 10 years of the loan.) An example of a schedule of annual revenues and expenditures is provided herein, and an electronic version and an example of how to use it, are included in the CWCB website at www.cwcb.state.co.us.

4. Loan Repayment Sources - Describe sources of funds for loan repayment, such as assessments, water sales, property taxes and grants. Discuss current water rates/assessments/fees. Feasibility studies for projects with a hydropower component should include an assessment of the potential market for the hydropower.
5. Financial Impacts – Discuss financial impacts of the project on total debt, water rates, assessments of users, and property taxes. Determine future rates needed to cover CWCB loan obligations and additional operating costs. Discuss savings or new revenues generated.
6. TABOR (Taxpayer’s Bill of Rights) Issues - Provide a full discussion of TABOR issues, particularly regarding the ability to incur multi-year debt, and limits on increased tax revenues and spending. An election may be required for public entities not having the status of a qualified enterprise. The provisions of TABOR are complex and may require an attorney and/or accountant opinion.
7. Collateral - Discuss specifics of the loan collateral or security being offered by the borrower (in accordance with CWCB Policies) to assure repayment of the CWCB loan. The type of collateral will vary based on the type of organization, and typically may include a pledge of revenues/assessments, project facilities/water rights, or real property. If real property is offered as collateral, the applicant will be required to submit supporting documentation of land values, based on current land use and including improvements financed by the CWCB, from a Colorado Certified General Appraiser. If water rights are being purchased or offered as collateral, the applicant will be required to submit a written appraisal or opinion of value from a qualified water rights appraiser supporting the purchase price and value.
8. Sponsor Creditworthiness - Provide information to be used by staff to evaluate creditworthiness and financial need (in accordance with CWCB Policies) as follows:
 - a) Current schedule of rates or assessments.
 - b) Copies of the three most recent audit reports of financial statements.
 - c) A current credit report, if requested.

Total Project Cost	\$2,000,000
O&M	0.50%
Insurance	0.15%
Replacements	0.20%
Administration	0.30%
Total	1.15%
Other Revenue	25%
Number of Shares in Co.	2,000
Inflation	3.0%
Interest on Reserves	3.0%

Financing					
Source	Share	Principal	Interest	Years	Payment
CWCB Loan	90%	\$1,800,000	2.5%	30	\$86,000
Bank Loan	10%	\$200,000	6.0%	10	\$27,174

SCHEDULE OF REVENUE and EXPENDITURES

Annual Revenue

Year of Operation	Irrigation Assessment	Other Revenue	Total Revenue	Assessment Per Share
1	\$108,386	\$36,129	\$144,515	\$54
2	108,710	36,237	144,947	55
3	109,050	36,350	145,400	54
4	109,406	36,469	145,874	55
5	109,778	36,593	146,370	55
6	110,166	36,722	146,889	55
7	110,573	36,858	147,431	55
8	110,997	36,999	147,996	55
9	111,440	37,147	148,587	56
10	111,902	37,301	149,203	56
11	85,747	28,582	114,330	43
12	86,443	28,814	115,257	43
13	87,159	29,053	116,212	44
14	87,897	29,299	117,196	44
15	88,657	29,552	118,209	44
16	89,440	29,813	119,253	45
17	90,246	30,082	120,328	45
18	91,076	30,359	121,435	46
19	91,932	30,644	122,576	46
20	92,813	30,938	123,750	46
21	93,720	31,240	124,960	47
22	94,655	31,552	126,207	47
23	95,618	31,873	127,490	48
24	96,609	32,203	128,812	48
25	97,631	32,544	130,174	49
26	98,682	32,894	131,577	49
27	99,766	33,255	133,021	50
28	100,882	33,627	134,509	50
29	102,032	34,011	136,042	51
30	103,216	34,405	137,621	52
Totals	\$2,974,630	\$991,543	\$3,966,173	

Annual Expenditures

Operation, Maintenance, Replacement	CWCB Loan Reserve Fund		Payments on CWCB Loan	Payments on Bank Loan	Interest on Reserve Funds	Total Expenditures
	Annual	Accum.				
\$23,000	\$8,600	\$8,600	\$86,000	\$27,174	\$258	\$144,515
23,690	8,600	17,200	86,000	27,174	516	146,370
24,401	8,600	25,800	86,000	27,174	774	144,947
25,133	8,600	34,400	86,000	27,174	1,032	145,400
25,887	8,600	43,000	86,000	27,174	1,290	145,874
26,663	8,600	51,600	86,000	27,174	1,548	146,889
27,463	8,600	60,200	86,000	27,174	1,806	147,431
28,287	8,600	68,800	86,000	27,174	2,064	147,996
29,136	8,600	77,400	86,000	27,174	2,322	148,587
30,010	8,600	86,000	86,000	27,174	2,580	149,203
30,910		86,000	86,000		2,580	114,330
31,837		86,000	86,000		2,580	115,257
32,793		86,000	86,000		2,580	116,212
33,776		86,000	86,000		2,580	117,196
34,790		86,000	86,000		2,580	118,209
35,833		86,000	86,000		2,580	119,253
36,908		86,000	86,000		2,580	120,328
38,015		86,000	86,000		2,580	121,435
39,156		86,000	86,000		2,580	122,576
40,331		86,000	86,000		2,580	123,750
41,541		86,000	86,000		2,580	124,960
42,787		86,000	86,000		2,580	126,207
44,070		86,000	86,000		2,580	127,490
45,392		86,000	86,000		2,580	128,812
46,754		86,000	86,000		2,580	130,174
48,157		86,000	86,000		2,580	131,577
49,602		86,000	86,000		2,580	133,021
51,090		86,000	86,000		2,580	134,509
52,622		86,000	86,000		2,580	136,042
54,201		86,000	86,000		2,580	137,621
\$1,094,235	\$86,000		\$2,579,993	\$271,736	\$65,790	\$3,966,173

2.6 Conclusions and Recommendation

Provide a summary of study conclusions, and an opinion and recommendation as to the overall feasibility of the project and the feasibility of loan repayment.

2.7 Loan Request Submittals

The following is a list of documents that should be submitted with a loan request:

- a. Transmittal Letter – A letter of transmittal of the Loan Application and Loan Feasibility Study, from an officer of sponsoring organization.
- b. Loan Application - A signed Loan Application shall be bound and placed under the front cover of the Loan Feasibility Study. The application form is available on the CWCB website at www.cwcb.state.co.us.
- c. Loan Feasibility Study – A completed Loan Feasibility Study is submitted for staff review and comment. It is typical for the Loan Feasibility Study to have Appendices – such as project technical studies, design drawings and maps, environmental studies, by-laws and articles of incorporation (or other formation documents), financial statements, resolutions, and project input letters and comments, etc. Complex Loan Feasibility Studies should also provide an Executive Summary.

Approved by the CWCB
January 25, 2006 Board Meeting
Agenda Item #21a