ALASKA DRINKING WATER FUND

STATE DRINKING WATER LOAN PROGRAM

INTENDED USE PLAN
FINAL

FFY10 Grant Allotment

State Fiscal Year 2011

Submitted to the U.S. Environmental Protection Agency
By
Alaska Department of Environmental Conservation
Division of Water
June 2010

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INTRODUCTION

New to this year's IUP is the inclusion of a Green Project Reserve (GPR) and funding subsidy component under the program. These new components which are similar to last year's ARRA (American Recovery & Reinvestment Act of 2009) GPR and funding subsidy are now included as a provisional requirement under the program's annual federal capitalization grant. Further discussion of GPR requirements and funding subsidy can be referenced under Sections "Additional Subsidization – Disadvantage Community/System Assistance", page 12 and "Green Infrastructure", page 13.

PROGRAM OVERVIEW

The purpose of the Alaska Drinking Water Fund (ADWF) is to make low interest loans available to Alaskan municipalities and other qualified entities for financing drinking water projects.

Loans can finance up to 100 percent of a project's eligible costs for planning, design and construction. In addition, loans can serve as local match for the Alaska Department of Environmental Conservation (DEC) Municipal Water, Sewer and Solid Waste Matching Grants Program or most other federal or state funding sources.

A range of projects and associated costs are eligible for funding under the ADWF loan program, as described in Title 18, Chapter 76 of the Alaska Administrative Code.

Examples of Projects Fundable Under ADWF

- Planning and Design of Facilities
- Water Source Rehabilitation
- Water Treatment Facilities
- Water Storage Facilities
- Water Transmission and Distribution Systems

The federal government, through the Drinking Water State Revolving Fund (DWSRF) Program, provides the primary source of funding for the ADWF. In turn, the ADWF funds planning and construction for eligible drinking water projects throughout the state. Other eligible activities funded this year include:

Other Activities Funded by the ADWF

- Administration of the Fund
- Small System Technical Assistance
- Capacity Development Program
- State Drinking Water Program Management
- Drinking Water Protection: Wellhead Protection Program and Source Water Assessment Program

PROGRAM GOALS

The DEC administers the Alaska Drinking Water Fund, guided by the following long and short term goals:

Long Term

1. Protect public health, minimize the potential for drinking water contamination, and promote the completion of projects and non-project activities using best management practices and affordable and applicable technology.
2. Support the state's goal of ensuring that all public water systems in Alaska provide water that is safe to drink.
3. Fully implement a Capacity Development program for increased public health protection and public water system compliance with Safe Drinking Water Act requirements.
4. Develop and effectively manage a self-sustaining loan program, to facilitate compliance by all public water systems with the Safe Drinking Water Act (SDWA)(42 U.S.C. 300f – 300j) and the State of Alaska's Drinking Water Regulations (Title 18, Chapter 80 of the Alaska Administrative Code).

Short Term

1. Provide low interest loans of $23.7 million dollars for planning, design and construction of facilities that will reduce acute health risks and provide safe drinking water.
2. Provide not less than 20% of the capitalization grant amount awarded to the State and to the extent there are sufficient eligible project applications, funds for projects to be used for green infrastructure, water or energy efficiency improvements, and environmental innovative activities.
3. Provide at least 30% of the capitalization grant amount as a form of funding subsidy.
4. Provide $678,650 to the Wellhead Protection Program and overall drinking water protection activities to implement and assist owners, operators and communities in the development and implementation of drinking water protection programs throughout Alaska. EPA Region 10 approved Alaska's Drinking Water Protection Program (combined Wellhead Protection and source water assessments of public water systems, April 4, 2000.)
5. Provide $271,460 for operator training and technical assistance for communities with a population of less than 10,000 through Small Systems Technical Assistance Program.
6. Provide $1,357,300 to Capacity Development to fund activities to support and improve the technical, managerial and financial capacity of public drinking water systems (PWS) in Alaska.
7. Provide $1,357,300 to supplement State Drinking Water Program Management for SDWA compliance, continued primacy implementation, and public health protection activities.

8. Complete the next capitalization grant agreement with the U.S. Environmental Protection Agency (EPA) for federal fiscal year (FFY 11) Drinking Water Fund Allocation.

PROGRAM FUNDING – Funds Available

During State Fiscal Year (SFY) 11 a total of $23.7 million dollars is expected to be available for loans. The following table summarizes the monies contributed and the commitments and expenditures made since the inception of the program. The difference between funds available and total program commitments is the amount available for project loans in SFY 11. ADEC proposed to provide all $17.7 million in the form of direct loans to eligible drinking water systems. No other forms of assistance, such as insurance guarantees, will be offered.

Alaska Drinking Water Detailed Summary

Funding Source:		
Federal Grants		$122,562,000
FFY 10 Federal Capitalization Grant Request		$13,573,000
FFY10 State Match Appropriation		
Bond Proceeds		$2,714,600
State Match, prior years		
General Funds	$14,137,600	
Bond Proceeds	$10,399,360	
Total State Match		$24,605,019
Investment Interest		$10,915,175
Repayments		
Loan Principal	$24,627,694	
Loan Interest	$5,977,055	
Total Repayments		$30,605,019
Projected 2011 Repayments and Investment Earnings		7,000,000
Transfer from ACWF		$29,000,000
Total Funding		**$240,906,754**
Program Commitments:		
Loan Commitments		
Standard Loans Executed	$184,060,589	
Disadvantaged Assistance Loans/Grants Executed	$7,821,000	
Total Loan Commitments		$191,881,589
Bonding and Transactions Costs to be Paid		$2,724,600
Program Set-Asides		
Administrative Set-Aside	$5,445,400	
Source Water Assessment Program	$2,682,000	
Capacity Development	$4,446,524	
State Drinking Water Program Management	$4,923,330	
Wellhead Protection Program	$3,282,174	
Small System Technical Assistance	$1,801,086	
Total Program Set-Asides		$22,589,514
Total Commitments		**$217,195,703**
Net Available for Loans		**$23,711,051**

The following describes more fully each item in the previous table:

Funding Sources:

- "Federal Grants" is the total amount of federal EPA capitalization grants awarded to Alaska up to FFY 09.
- "FFY 10 Federal Allocation" is the amount of federal funding available to be requested in the grant application to be submitted to EPA.
- "FFY 10 State Match Appropriations" includes state funds provided as match for the grant which includes both general funds and bond receipts.
- "State Match, prior years" includes all the state match funding provided in years prior to FFY 10. It includes both general funds and bond proceeds.
- "Investment Interest" includes interest received on funds invested in the ADWF. These funds are listed in the amount available at the end of the third quarter of SFY 10.
- "Repayments" is the total amount of principal and interest repayments made by communities who have borrowed monies from the ADWF.
- "Projected 2011 Repayments and Investment Earnings" is the amount of interest payments, principal repayments and investment earnings anticipated to be received in SFY 11.
- "Transfer from ACWF" is the amount of funds transferred from the Alaska Clean Water Fund.

Program Commitments:

- "Loan Commitments, Standard Loans Executed" represents the actual loan agreements that have been executed.
- "Loan Commitments, Disadvantaged Assistance Loans/Grants Executed" represents grants that were made to certain economically disadvantaged communities early in the life of the program.
- "Bonding and Transaction Costs to be Paid" are anticipated administrative, bond sale and interest costs that will result from the sale of bonds in SFY 11.
- "Administrative Set-Aside" is the amount of funding that has been set aside for program administrative purposes up to the end of SFY 11.
- "Program Set-Asides, Source Water Assessment Program" is the total amount of funding that has been set aside for the Source Water Assessment Program up to the end of SFY 04. No further funding is requested to be set aside for this program as all of the Source Water Assessments were completed by June 30, 2004.
- "Program Set-Asides, Capacity Development" is the total amount of funding that has been set aside for the Capacity Development Program up to the end of SFY 11.
- "Program Set-Asides, State Drinking Water Program Management" is the amount of funding requested for the State Drinking Water Program Management program up to the end of SFY 11.
- "Program Set-Asides, Wellhead Protection Program" is the total amount of funding that has been used for the Wellhead Protection Program up through SFY 11.
- "Program Set-Asides, Small System Technical Assistance" is the total amount of funding that has been set aside for the Small System Technical Assistance Program up through SFY 11.

Set-Asides
A detailed financial picture of the prior and proposed uses of the set-asides follows:

Use of Safe Drinking Water Act Set-Asides

Program	Total Amount Requested	Used Through SFY 10	Use in SFY 11	Remaining Amount	"Banked" Amount
Source Water Assessment	$ 2,682,000	$2,682,000	$0	$0	$0
Capacity Development	$ 4,446,524	$ 3,089,224	$ 1,357,300	$0	$0
State Drinking Water Program Management	$ 4,932,330	$ 3,575,030	$ 1,357,300	$0	$0
Wellhead Protection	$ 3,282,174	$ 2,603,524	$ 678,650	$0	$0
Small System Technical Assistance	$ 1,801,086	$ 1,529,626	$ 271,460	$ 194,241	$ 297,764
Administrative Assistance	$5,445,400	$ 4,902,480	$ 542,920	$0	$ 0

State Match

A capital budget bill that authorizes the required state match of $2,714,600 necessary to capture the FFY 10 grant has been passed by the State legislature. These funds are short-term bond funds. The bonding transaction costs are estimated to be $5,000. These monies will be available for program use in the state fiscal year that begins on July 1, 2010.

Fund Accounting Separation

Two DEC divisions, Environmental Health and Water, will conduct ADWF activities, but their administrative efforts will be unified through department management. The Alaska Drinking Water Fund, a separate enterprise fund of the State, was created by statute to account for funds for project activities. Other accounts have been established for the set-aside activities. Project and non-project activities will always be kept separate and distinct in character and will be easy to audit. Alaska will provide assistance for activities carried out in response to Section 1452(k) of the Safe Drinking Water Act (SDWA), but DEC will not establish a separate revolving fund for 1452(k) activities. Only the ADWF will be a revolving assistance fund for construction of drinking water projects for the foreseeable future.

Administrative Fees

DEC has instituted an administrative fee structure and has been collecting fees since December 29, 2000. As of April, 2010, $1,476,418 has been collected. DEC anticipates collecting more fees during SFY 11. Federal law limits the use of these funds to program administration. DEC anticipates beginning to draw on these fees to pay for program administration in three to four years.

Interest Earnings Assumption

Projections assume that the earnings on invested funds continue at 2.5%. The interest rate charged to borrowers has been reduced to 1.5%. All loans, both current and new will have this new rate. This rate consists of 1% applied toward interest, and 0.5% applied toward an administrative account.

Funding History

The ADWF was first capitalized in SFY 97 with an initial value of $27,984,253. Fund value has grown steadily to its present (April 20, 2010) value of $192,991,790.

Historical Facts about the ADWF Project Fund

As of April 20, 2010:

- 49 projects have reached construction completion and 47 projects are in repayment status.
- $30,605,019 has been received in repayment principal and interest.
- $1,476,418 has been received in fees.
- 23 loans for a total of $190,060,589 have been made to 19 communities.
- 10 loans for disadvantaged assistance for a total of $7,821,000 have been made to 10 communities.
- $10,915,175 in investment interest has been earned through April, 2010.
- Administrative funds of $5,445,400 have been set aside to cover program operating costs.
- $2,682,000 has been set aside for source water protection activities.
- $4,446,524 has been set aside for capacity development activities.
- $4,932,330 has been set aside for state drinking water program management activities.
- $3,282,174 has been set aside for wellhead protection.
- $1,801,086 has been set aside for small system technical assistance.

Growth of the ADWF

The DEC maintains projects of the future value of the ADWF. Key variables used in the projections include:

- Capitalization rate
- Interest earnings
- Set-aside use

1. Capitalization Rate Assumptions

Projections assume that the state will continue to receive approximately $13.5 million in annual federal capitalization grants. It is also assumed that the state will continue to issue short-term bonds for the purpose of generating a portion of the required state match and retiring bond debt with interest earnings from the fund.

2. Set-Aside Use Assumptions

Set-asides have a negative effect on fund growth as they divert money from the fund to other uses. Projects assume the following set-aside use:

- Administrative – 4% of the federal capitalization grant
- Small System Technical Assistance – 2% of the federal capitalization grant
- Drinking Water and Wellhead Protection
- Capacity Development

  } 15% of the federal capitalization grant
- State Drinking Water Program Management – 10% of the federal capitalization grant

PROJECT ASSISTANCE AND ACTIVITIES

Selection of Projects

1. Identification of Priority Projects

A mailing was done on December 30, 2009 informing eligible recipients that the ADWF questionnaire was available electronically (on-line) for completing and submitting questionnaires. In the solicitation, eligible recipients were informed of new funding provisions which included consideration of loan subsidies and green related projects.

2. Compliance Review

Before a project can receive loan fund assistance, system owners must demonstrate that they have, or will have, the technical, financial and managerial capacity to operate the system in compliance with state and federal law.

ADEC verifies compliance in several ways. First, at the time a system owner submits a questionnaire, the system history is reviewed to determine if it is in compliance with major federal and state requirements or if the project will bring the system into compliance. In this step, if a system is not in compliance, it is assessed to determine what is needed to bring it into compliance. An applicant must then enter into a formal agreement with the Department to take steps to bring its system into compliance before it can be further considered for assistance.

This formal agreement can be in the form of a Compliance Order by Consent (COBC) or a compliance schedule proposed by the applicant and approved by the ADEC Drinking Water Program. The schedule can be supported by a technical document such as a project feasibility study or water master plan. All proposed compliance schedules must also be reviewed and approved by the Department. The project proposed must be part of the agreement and have a primary goal to bring the system into compliance. If a system fails to comply with the COBC or its compliance schedule, then loan disbursements will cease and the system will be subject to enforcement action.

After compliance status has been determined, a system is evaluated for its overall capacity. Once an applicant's project is found to be within the fundable portion of the final priority list, the Department will assess capacity using the program guidance approved by EPA. This guidance is reflected in a document called the Capacity Assessment Worksheet, included as Appendix II. This worksheet is designed to give the Department a broad, overall picture of a system's capacity.

Additional information may be required from the loan applicant prior to executing a loan agreement. If a system cannot demonstrate sufficient capacity, the Department will determine what steps need to be taken, and decide whether the system will be able to achieve capacity within a reasonable amount of time. If a system is determined to be unable to achieve capacity in a reasonable time, it will be by-passed in the current year's funding cycle.

Staff from the Environmental Health Division of ADEC participates in this process to ensure that all systems are either in compliance or that proposed projects will bring them into compliance with state and federal program requirements.

3. Scoring Criteria

After compliance review, newly submitted questionnaires were scored and ranked by ADEC staff, using the criteria contained in Appendix III, "Alaska Drinking Water Fund Priority Criteria."

All projects were placed in numerical order by score, from the highest to the lowest. In the event of ties, projects with the lowest median household income receive the higher ranking. This is done as fairly as possible, to provide low interest loans first to those eligible entities with the greatest financial need. However, if a project is needed to meet minimal required subsidy funding and/or the Green Project Reserve, an eligible project will be placed higher in ranking. Once review was complete, this ranking formed the draft priority list for SFY 11. Further discussion of these lists can be referenced under "Distribution of Funding for Projects."

The priority list along with the other proposed non-project uses of the ADWF, are the key components of the IUP. The draft funding and planning priority lists will be sent to all qualified recipients for review and comment. Notice will be published in a major newspaper advertising the availability of the draft IUP and inviting comment. The IUP will also be published on the Department's web site. Comments solicited during this public notice period and ADEC responses will be published in Appendix VI.

Distribution of Funding for Projects

Appendix IVa shows projects proposed for funding in SFY 11. The total amount needed to fund all of projects on the priority list is $25,424,876. The total amount available, as described on page 5 is $23,711,051. While the Department intends to fund projects on the priority list in their ranking order, funding down to the Anchorage – Eagle River Heights Water Upgrade project exceeds available funding by $1,713,825. We intend to negotiate with the Anchorage for a phased approach to appropriate pieces of this project to utilize the available funds.

Appendix IVb contains the "planning portion" of the priority list for SFY 11. The planning portion includes those projects that did not score high enough to be eligible for funding initially. In the event that projects in the funding portion are by-passed, projects from the planning portion may be considered for funding in rank order.

Appendix V contains a description of each project on the funding list in alphabetic order by utility name. Projects will be funded in priority order to the limit of the funds available. To the extent possible, ADEC will follow the funding order of this list. If it becomes necessary to fund a project out of the listed order, ADEC will use the by-pass procedures described below for determining which project is next eligible for assistance.

Emergency Procedures

The Department may make loans for projects that request funds under emergency conditions such as natural disasters and terrorist actions. Upon a declaration of an emergency by federal or state emergency response officials or upon a finding of the ADEC, funds may be made available for projects not currently described in this IUP. By-pass procedures may be waived under direct threat of severe public or environmental harm. Reasonable efforts to fund projects in priority order will still be followed under emergency situations.

By-pass Procedures

In the event that an applicant notifies ADEC that it will not be able to execute a loan as planned, the funds will be offered in priority order for those remaining projects on the unfunded planning priority list. A by-passed project retains its priority and will be offered available funds before offering funds for lower priority projects. For each and every occasion that these by-pass procedures are exercised, ADEC will document that the funds were offered in priority order (except as noted). It is the State's intention to adhere to the funding priority to the maximum extent possible and to work with by-passed projects to ensure that they remain eligible for future funding.

ADEC also recognizes that the realities of operating a loan program occasionally require the use of by-pass procedures to ensure that program commitments are met. ADEC is required to execute a certain number of binding commitments each year or risk losing future federal grant funds. If a system owner has not applied for a loan after four (4) months of a project being on the funding priority list, ADEC will, without justification, by-pass that project, regardless of priority, to fund projects on the planning list that are ready to proceed. Exception to this rule is discussed in the following paragraph.

New for this year's federal funding of the ADWF is the requirement to meet minimal funding needs for offering loans with subsidies and projects with Green eligible components. To meet these mandated minimal funding needs, the Department will if necessary bypass a priority listed project with the next highest scored eligible project off the planning list which meets these requirements. This bypassing will be done until funding requirements are minimally met for funding subsidy and Green projects. Further information on these funding requirements may be referenced on page 12 and 13.

Additional Loan Fund Policies

1. Small Community Participation

Of the amount of funding being proposed for SFY 11, over 20 percent (which includes the State match) would go to communities with a population of less than 10,000. Since the program's inception, 44 percent of the loans or $87,818,893 million have been provided to small systems. This exceeds the 15 percent goal or $13,172,834 million program requirement for participation by small systems. Although ADEC does not expect to need this, ADEC will bank the excess $74,646,059 million for future years when the number of small system loans may fall short of the percent goal.

2. Privately Owned Systems

Beginning July 1, 2002, project loan assistance can be provided to privately owned systems that are certificated and economically regulated by the Regulatory Commission of Alaska (RCA). Since then, ADEC has executed 10 loans totaling $8,517,406 with privately owned drinking water utilities.

3. Financial Terms of Loans

Loan terms are contained in Title 18, Chapter 76, Section 255 of the Alaska Administrative Code and are summarized below:

Loan Interest Rates

Loan Term	Interest Rate Based upon Amount Borrowed
1 year or less	0.5%
1 to 5 years	The greater of (a) 1.0% or (b) 12.5% of the current bond rate as defined by the Municipal Bond Index at the time the loan is made
5 to 20 years	The greater of (a) 1.5% or (b) 18.75% of the current bond rate as defined by the Municipal Bond Index at the time the loan is made

4. Additional Subsidization – Disadvantage Community/System Assistance
The FFY10 federal capitalization grant requires that a least 30% ($4,071,900) of the grant amount be in the form of additional subsidies. The Department has chosen to offer principal forgiveness in an amount up to 50% of the value of a loan made by the State's DWSRF Program. However, only a $1.5 million cumulative maximum subsidy amount per community/system is allowed for all projects in receipt of funding to the community/system.

For project eligibility, the Department has chosen to give loan subsidies as disadvantaged community/system assistance. Disadvantaged communities/systems are provided a subsidy as part of their project assistance to help alleviate economic hardships for constructing a capital project. A community/system is considered disadvantaged if it's:

- MHI (Median Household Income) is less than the state average MHI that is currently published by the Alaska Department of Commerce, Community and Economic Development or by the U.S Census Bureau, whichever is greater. For non-publically owned water systems, the MHI is based on the community/system in which the system resides.

  OR,

- Rate of unemployment is above the state average unemployment rate that is currently published by the Alaska Department of Commerce, Community and Economic Development or by the U.S Census Bureau, whichever is greater. For non-publically owned water systems, the rate of unemployment is based on the community/system in which the system resides.

For a community/system to qualify for disadvantaged assistance, they need to meet one of the above criteria. For Borough's of the State, the above criteria can be used for a specific community/system within the Borough if the project is solely benefitting just that community/system.

If a community/system meets their maximum cap on one or more of higher ranking project(s), and has additional projects listed on either list, those projects will only be funded with no subsidy. Additionally, the priority lists on Appendix Ia demonstrates that at least 30% of the capitalization grant amount will be provided via principal forgiveness. Any subsequent revision

to this Fundable Project Priority list will likewise demonstrate that at least 30% of the grant will be provided via principal forgiveness.

5. Green Infrastructure
Under the total FFY 10 capitalization grant amount awarded to the State, and to the extent there are sufficient eligible project applications, not less than 20% ($2,714,600) of funding provided for projects must be used for following category types: green infrastructure, water or energy efficiency improvements, and environmental innovative activities. Green projects are listed under Appendix IVa and IVb by indication of green project category type and whether project justification is either categorical, or requires a business case demonstration.

Under this IUP, two (2) projects listed on the Project Priority list have been identified as being a Green project based on USEPA current guidance. The cumulative amount of these projects is $4,650,000 which exceeds the 20% minimal required amount by $1,935,400. If insufficient green eligible components are determined for meeting the Green Project Reserve, the Department will withhold any deficient green project fund amount which may be needed for meeting the minimal reserve amount of $2,714,600.

NON-PROJECT ACTIVITIES

Non-project activities are those activities defined by the SDWA Amendments of 1996 as uses of DWSRF money that are not related to construction of public water systems or modification of infrastructure. DEC intends to make as much capitalization loan money available as possible, while at the same time recognizing that there is more to the delivery of safe drinking water than simply constructing or modifying a water system. In addition to the administrative and technical assistance uses of the SRF described in the Projects Section of the IUP, submitted by the Division of Water, other non-project activities intended to be funded by the SRF are outlined below:

Non-Project Activities Funded by the DWSRF

- Administration of the Fund
- Small System Technical Assistance
- Capacity Development Program
- Drinking Water and Wellhead Protection Program
    - Source Water Assessment Activities
    - PWS Security and Emergency Response Planning
- State Drinking Water Program Management

Administration of the Fund

The Safe Drinking Water Act allows for up to four percent of the state's annual federal allotment to be used to administer the loan program. In SFY 11, ADEC intends to use $542,920 to administer the fund. Activities include evaluating loan applications, reviewing and processing payments, assisting system in capacity reviews and performing project audits. This level of expenditure is expected to remain reasonably stable for several more years.

Small System Technical Assistance

The Small System Technical Assistance (SSTA) activity can use up to two percent of the federal capitalization grant; ($271,460 is available - $13,573,000 multiplied by two percent). The funds used under the 2% Small System Technical Assistance Set-Aside will continue funding small system training development and classroom training courses as previously approved by EPA. In addition, Operations Assistance Programs (OAP) staff will provide direct technical assistance to small system operators and owners. ADEC intends to use $271,460 of the available amount and will provide a detailed work plan to EPA for approval of all SSTA-funded activities.

Local Assistance and Other State Programs Set-Aside

The state can request up to 15% of the DWSRF capitalization grant on an annual basis for Wellhead Protection, Capacity Development, and other appropriate activities; however, no more than 10% of the capitalization grant may be used for Wellhead Protection, Capacity Development, or any other specific activity each year.

1. Capacity Development Program

Under the SDWA Section 1452(k)(1)(B), the state is requesting $1,357,300 for Capacity Development activities. The funds for Capacity Development activities will be used to both modify and fully implement the state's current EPA-approved Capacity Development Strategy. Additionally, the funds will be used to complete onsite system status component assessments for Alaska's PWS using a surface water source or ground water under the direct influence of surface water; provide technical and compliance assistance to PWS owners and operators during sanitary surveys; assist water system owners in completing water system capacity self assessments; and provide interactive workshops and public outreach on water system capacity (technical, managerial, and financial) issues and assessments.

The Drinking Water Program (DWP), a sub-unit of the Division of Environmental Health is planning to utilize $936,536 of the total amount requested under this set-aside. A detailed work plan for Capacity Development activities will be provided to EPA for approval.

The Operations Assistance Programs (OAP), a sub-unit of the Facilities section of the Division of Water, is planning to utilize $420,763 of the total amount requested under this set-aside to continue funding the operator reimbursement program and a variety of capacity development activities, as well as a portion of the personal services costs for 3 positions in OAP. A separate detailed work plan for OAP activities and personal service costs under this set-aside will be submitted to EPA for approval.

2. Drinking Water and Wellhead Protection Program

Under the SDWA Section 1452(k)(1)(D), the state's Drinking Water Program is requesting **$678,650** from the Local Assistance and Other State Programs Set-Aside for Drinking Water and Wellhead Protection activities during FY 2009. The funds for Drinking Water and Wellhead Protection activities will be used to continue with the implementation of a statewide voluntary Drinking Water Protection Program which will include: assist public drinking water system owners and/or operators, and communities develop Drinking Water Protection Plans; complete PWS source water assessments of new PWS and update and QA/QC assessments of existing systems; assist PWS in the completion of Vulnerability Assessments and the development and implementation of Emergency Response Plans; and conduct public outreach through workshops and presentations on drinking water protection tools and strategies.

A detailed work plan and budget for the Wellhead Protection Program activities will be provided to EPA for approval.

Program Management Set-Aside

Under the SDWA Section 1452 (g)(2), the state can request on an annual basis up to 10% of the DWSRF capitalization grant for Public Water System Supervision (PWSS) program management activities. This particular set-aside requires an additional 1:1 match by the state program. The Drinking Water Program is requesting $1,357,300 from the State Drinking Water Program Management Set-Aside and will use $1,114,600 state funds and $242,700 in "Historic Match" credit, based upon the SFY 1993 PWSS grant state overmatch expenditures, for the 1:1 match requirement for use of this set-aside. The total usable budget for PWSS Program Management Set-Aside activities is $2,471,900.

The funds for State Drinking Water Program Management activities will be used for SDWA compliance requirements, continued development and implementation of primacy activities, and public health protection for the residents and visitors to the State of Alaska.

A detailed work plan and budget for the State Drinking Water Program (PWSS) Management activities will be provided to EPA for approval.

CONTENT OF APPENDICES

APPENDIX I

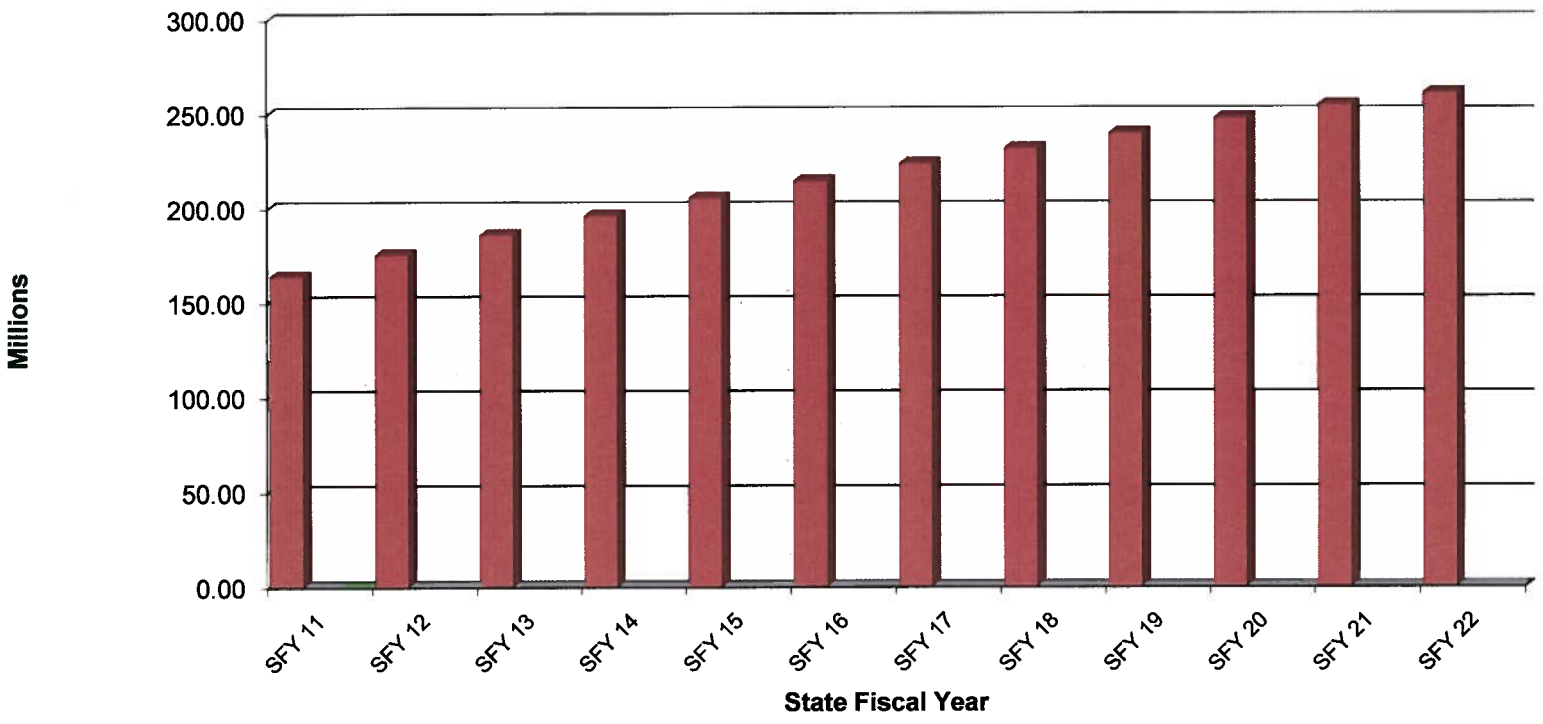
Cumulative Amount of Loans

Provided to Projects

ALASKA DRINKING WATER FUND

Funds Available For Loans

Net Cumulative Funds Available / deducting all Set-Asides taken (including banked set-asides)



APPENDIX II

Capacity Assessment Worksheet

ALASKA DRINKING WATER FUND

Appendix II
Capacity Assessment Worksheet for Potential Projects

The 1996 amendments to the federal Safe Drinking Water Act require Alaska to assess the capacity of potential recipients of loans from the Alaska Drinking Water Fund (ADWF). By capacity, EPA means the technical, financial and managerial capabilities of a water system for proper long-term operations. If a loan applicant is found lacking in these areas, we may not be able to provide financial assistance from the ADWF unless the capacity of the system is guaranteed.

Consequently, we are asking for detailed information from potential loan applicants to help us in this assessment. Such things as financial records, enterprise fund budgets and audits, along with detailed planning and engineering information for your system will help ensure our ability to provide you this loan for your project.

The following is an outline of our assessment process. Please carefully review and complete these worksheets and make sure the information you provide us is current and accurate.

TECHNICAL CAPACITY ASSESSMENT

We intend to use the following questions and answers to help us evaluate your systems technical capacity. These questions address the physical components of your drinking water system and are related to water treatment facilities, water sources, storage and pumping capacity and water distribution capacity. Pertinent technical documentation such as engineering feasibility studies and reports should be provided as appropriate.

1.) **Are the existing water treatment facilities adequate and functional?** Please provide a description of the system and the proposed project. Will this system likely meet federal and state drinking water regulations expected to be enacted within the next four years? *This includes the ICR, Groundwater Disinfection Rule and Enhanced Surface Water Treatment Rule.*

2.) **Is the existing water source developed and protected?** Will this system likely meet future source protection requirements?

3.) **Is the current system able to meet peak demand flow and pressure in all points of the treatment and distribution system?**
What is the current peak demand and minimum pressure at peak demand?
Does the system experience seasonal or periodic difficulties?
When was the last leak detection survey? Please describe any corrections made.

4.) **Does the system employ, or have access to, the correct level of certified or qualified operators?**
Under State regulation, all water systems serving more than 500 people are classified as to complexity and require either a I, II, III or IV level operator or a qualified surface water system operator.
Please provide the name and certification number of your lead certified operator or operators in charge of your water treatment and water distribution system.

5.) **Has the water system been out of compliance with federal or state drinking water regulations within the past year?**
Please provide any compliance or enforcement actions taken recently such as Notices-of-Violation (NOVs), Compliance-Order-by-Consent (COBCs), boil water notices and the most recent sanitary survey.

FINANCIAL CAPACITY ASSESSMENT

Financial capacity is assessed by examining the fiscal condition and financial management aspects of the system. Financial aspects relate to the systems ability to raise the necessary funds to ensure proper operation and maintenance, including long-term depreciation and reserve accounts. Financial management refers to the management of those fiscal aspects.

If a system is regulated by the Regulatory Commission of Alaska (RCA), formerly the Alaska Public Utilities Commission (APUC), information contained in the application for the current Certificate of Public Convenience and Necessity or the annual RCA report may help demonstrate financial capacity. A copy of the annual report to the RCA may also contain the necessary information related to financial capacity. For example, if a system is applying for the RCA certificate, a copy of the application package should be submitted for review with the ADWF loan application. If a system already has a current RCA Certificate, a copy of the annual report to the RCA should be submitted for review with the ADWF loan application.

For those systems that are not regulated by the RCA, have not completed an application package for certification by RCA, or have not submitted an annual report to the RCA, the following questions will help us evaluate the financial aspects of the system. These questions relate to total user charge revenues and total system expenses, other revenue streams, fairness and affordability of user charges, cash budgeting, preparation and use of annual and capital budgets, and periodic financial audits.

1.) **Does the water system have user ordinances and a rate structure?**
How often are the rates reviewed or updated? When was the last update?

2.) **Does the water system revenue from user charges meet or exceed system expenses?**
Please submit your water utility budget documents that clearly show revenue and expenses.

3.) **Are other funds contributed to water system operations to offset expenses?**

4.) **How affordable are water system rates?**
What are the estimated residential rates per household (after the project) compared with the median household income and other similar system rates?

5.) **Does this system use an annual budget?**

6.) **Does the system include a cash budget within the annual budget for operations and emergency purposes?**

7.) **Does the system use a capital budget?**

8.) **Does this system us a capital improvement plan?**

9.) **Does this system undertake regular financial audits?**
Please provide the most recent financial audit of the water utility accounts, including any appropriate state single audit documents along with the auditor management letters.

10.) **How will this loan be repaid?**
Please describe how this loan debt will be retired. If user fees are proposed as the repayment source, how much will rates need to be increased to retire this loan?

MANAGERIAL CAPACITY ASSESSMENT

Managerial capacity is assessed by evaluating managerial qualifications and experience, organizational structure, the compliance history of the system, training programs offered, preventive maintenance programs, and documentation of ownership and responsibility.

The following questions help us to assess the systems managerial capacity and address the following aspects of system management:

1.) **How is the water system managed?**
Who is the system owner(s) and manager?
Does the system utilize personnel and policy procedures or manuals?
Does the system require or encourage continuing education for personnel?
What type of organizational structure exists?

2.) **Does the system have written operation and maintenance manuals?**

3.) **Does the system employ, as needed, the services of a professional engineer?**

4.) **Does the system have up-to date record or as-built drawings?**

5.) **Does the system implement a preventative maintenance program?**

6.) **Does the system have an emergency operating plan and safety program?**

7.) **What type of public outreach education programs are implemented?**

8.) **What professional organizations are operators and system managers members of?**

APPENDIX III

Priority Criteria

ALASKA DRINKING WATER STATE REVOLVING LOAN FUND PRIORITY CRITERIA FOR FY11 DRINKING WATER PROJECTS

The federal Safe Drinking Water Act requires states to fund projects from their state revolving loan fund based upon public health, compliance and affordability criteria. The following criteria have been established for Alaska's prioritization process accordingly.

SAFE DRINKING WATER ACT CONSIDERATIONS

A. PUBLIC HEALTH *(Only one)*

1) This project will correct the cause of a documented human disease event. 100 pts
Examples include outbreaks of Hepatitis, Giardiasis, and Cryptosporidiosis.

2) This project will provide potable water to a community or area currently not served by piped service. 75 pts
Examples include existing watering points, existing water buckets/self haul communities or other existing unpiped systems. Projects predominantly for future growth or areas served by adequate supplies are ineligible.

3) This project will eliminate acute risks to public health. 75 pts
Examples include projects that will resolve microbial risk from inadequately treated surface water or groundwater, CT tank construction or treatment of dangerously high levels of contaminants such as nitrate exceedances or chemical concentrations greater than 10-day health advisories.

4) This project will correct potential long-term, chronic health problems or repair or replace serious distribution system problems or leaks. 50 pts
Examples include VOC removal, pH adjustment or replacement of wood-stave pipe and/or correction of potential distribution system freeze-up problems.

5) This project will eliminate potential health hazards, provide treatment of secondary contaminants such as iron or manganese, or enhance system operations. 30 pts
Examples include periodic exceedances of primary MCLs due to mechanical or structural problems, undersized or inadequate components or low pressure problems. This can include SCADA and other process instrumentation.

5) This project has no significant health hazards related issues. 0 pts

B. COMPLIANCE WITH SAFE DRINKING WATER ACT *(Only one)*

1) This project will allow a system to come into compliance with an executed Compliance-Order-By-Consent (COBC) or Administrative Order, Judicial Decision or Consent Decree. 35 pts
Points will be awarded only for agreements executed between the appropriate primacy health agency (U.S. Environmental Protection Agency or Alaska Department of Environmental Conservation) and the system owner or for a judicial decree.

2) This project will resolve a significant compliance issue. 25 pts
Examples include SNC violations, NOVs and boil-water notices.

3) This project will address a documented compliance issue. 10 pts
Examples include documented compliance issues that are relatively minor in nature. Documentation can include agency notification letters.

4) This project has no significant compliance related issues. 0 pts

C. AFFORDABILITY *(Only one)*

These points will only be given if a water system provides recent income data, population figures and a fee structure or ordinances. The average monthly household cost for water service, after project completion, will be divided by the monthly mean household income. The monthly mean household income will be documented by a current survey or census data.

High (monthly water cost/monthly income)	> 1%	10 pts
Moderate (monthly water cost/monthly income)	0.5% - 1%	6 pts
Low (monthly water cost/monthly income)	< 5%	3 pts

D. OPERATOR CERTIFICATION

The system employs, or has access to, the correct level of certified or qualified operators 5 pts

E. LOAN REPAYMENT

The system has adopted debt retirement or loan repayment measures. This could include a rate structure guaranteeing this debt retirement or other repayment measures as documented by an independent single audit or certified enterprise fund budget documents. 5 pts

F. ADDITIONAL CONSIDERATIONS

1) Construction documents have been prepared and submitted 5 pts

2) A detailed engineering feasibility study, including detailed cost estimates, has been prepared and submitted. 5 pts

3) This project will result in the regionalization and/or consolidation of two or more existing public water systems. 5 pts

4) An environmental review process has been prepared or completed. 5 pts

APPENDIX IVa

ALASKA DRINKING WATER FUND

Project Priority List

ALASKA DRINKING WATER FUND

Funding Priority List

Fiscal Year 2011

System Owner	Project Title	Project Number	Score	Amount Requested	Cumulative Amount Requested	Total Funding Available Amount [5]	Total Subsidy Available Amount [6]	Actual Project Available Amount	Financed Funding Amount	Subsidized Funding Amount [7]	GREEN Program Amount [8]	GREEN Project Type [9]
Petersburg	Water Treatment Plant Upgrades Phase 3	685241	131	$600,000	$600,000	$23,711,051	$4,071,900	**$600,000**	$300,000	$300,000		
Sitka	UV Disinfection Facility [1]	783431	121	$4,000,000	$4,600,000	$23,111,051	$3,771,900	**$4,000,000**	$2,500,000	$1,500,000	$650,000	ENG-BC
Palmer	Steel Water Main Replacement [1,2]	677221	81	$4,000,000	$8,600,000	$19,111,051	$2,271,900	**$4,000,000**	$2,500,000	$1,500,000	$4,000,000	WTR-BC
Ketchikan	Baranof Reservoir Replacement [3]	481121	106	$2,730,000	$11,330,000	$15,111,051	$771,900	**$2,730,000**	$1,958,100	$771,900		
Juneau	Salmon Creek Water Source Secondary Disinfection [2]	445381	118	$1,270,000	$12,600,000	$12,381,051	$0	**$1,270,000**	$1,270,000	$0		
Ketchikan	Alaska Ave. Water Main Replacement Project	481131	86	$1,275,781	$13,875,781	$11,111,051	$0	**$1,275,781**	$1,275,781	$0		
Ketchikan	4th & 7th Avenues, Jackson & Monroe Water Mains	481141	86	$2,217,795	$16,093,576	$9,835,270	$0	**$2,217,795**	$2,217,795	$0		
Haines	Lily Lake Transmission Line	395101	81	$542,000	$16,635,576	$7,617,475	$0	**$542,000**	$542,000	$0		
Haines	A/C Pipe Replacement	395141	81	$740,800	$17,376,376	$7,075,475	$0	**$740,800**	$740,800	$0		
Anchorage	Old Glenn Highway Water Extension	130771	81	$2,150,000	$19,526,376	$6,334,675	$0	**$2,150,000**	$2,150,000	$0		
Haines	Barnett Water Tank Replacement	395151	76	$1,146,950	$20,673,326	$4,184,675	$0	**$1,146,950**	$1,146,950	$0		
Anchorage	Island-Kodiak-Kalgin Water	131181	76	$820,000	$21,493,326	$3,037,725	$0	**$820,000**	$820,000	$0		
Anchorage	Eagle River Heights Water Upgrade [4]	131191	76	$3,931,550	$25,424,876	$2,217,725	$0	**$2,217,725**	$2,217,725	$0		

Total Funded Amount: **$23,711,051** Total Green Amount: $4,650,000

Total Subsidized Amount [5]: $4,071,900

[1] Subsidy funding for the Sitka - UV Disinfection Facility and Palmer - Steel Water Main Replacement projects are limited to a maximum of $1,500,000.

[2] The Palmer - Steel Water Main Replacement project was by-passed from the Priority Planning List to the Priority List to meet minimum Green Project Reserve funding requirements.

[3] The Ketchikan - Baranof Reservoir Replacement project was by-passed from the Priority Planning List to the Priority List to meet minimum subsidy funding requirements.

[4] Funding of the Anchorage - Eagle River Heights Water Upgrade project will be dependent upon remaining available loan funds. The Department will negotiate with the Palmer to provide additional funds as they become available later in the year.

[5] Total available funding for projects was increased by an amount of $6,000,000 due to a loan deobligtion by the North Slope Borough prior to finalizing the IUP.

[6] Criteria for being eligible for a loan subsidy may be referenced on page 12 under the narrative section of the IUP.

[7] Funding subsidy for projects is based on meeting a minimal required amount of $4,071,900 under the State's capitalization grant for the program.

[8] Funding for Green projects is based on meeting a minimal required amount of $2,714,600 under the State's capitalization grant for the program.

[9] Green Project Reserve Category Type: GIF - Green Infrastructure, WTR - Water Efficiency, ENG - Energy Efficiency & EIN - Environmentally
Green Project Justification Type: BC - Business Case / CAT - Categorical.

APPENDIX IVb

ALASKA DRINKING WATER FUND

Project Priority Planning List

ALASKA DRINKING WATER FUND

Funding Priority Planning List

Fiscal Year 2011

System Owner	Project Title	Project Number	Score	Amount Requested	Cumulative Amount Requested	GREEN Project Type *
Golden Heart Utilities	Illinois Street Reconstruction Project	338131	75	$863,500	$26,288,376	WTR-BC
Golden Heart Utilities	Various Downtown Fairbanks Water Pipe Replacement	338151	75	$873,000	$27,161,376	WTR-BC
Sitka	Monastery Street Water Main Rehabilitation	783441	73	$782,000	$27,943,376	ENG-BC
Petersburg	Petersburg Water Upgrades project	685251	71	$828,338	$28,771,714	WTR-BC
Anchorage	Tidewater Gull Water Upgrade	131201	71	$2,146,250	$30,917,964	
Hoonah	Hoonah Water Trans Replacement Phase II	411021	68	$4,601,025	$35,518,989	WTR-BC
Palmer	Southwest Utility Expansion Phase IIb	671301	66	$7,000,000	$42,518,989	ENG-BC
Anchorage	Oklahoma-Muldoon Water Upgrade	131211	66	$735,724	$43,254,713	
Anchorage	Well 7 Upgrades	130271	61	$780,000	$44,034,713	
Soldotna	Well House "B" Reconstruction Project	791321	53	$990,000	$45,024,713	ENG-BC
Crystal Cathedrals Water - Haines	Storage Tank	395091	51	$150,000	$45,174,713	
Sitka	Waterline Loop System to Japonski Island	783451	51	$1,900,000	$47,074,713	WTR-BC
Anchorage	Ship Creek Water Treatment Facility Upgrade	131231	51	$3,197,500	$50,272,213	ENG-CAT
Anchorage	South Anchorage Water Extension	131241	51	$11,900,000	$62,172,213	
Anchorage	Wonder Park Water Upgrade Ph I - IV	131251	51	$1,687,000	$63,859,213	
Anchorage	Wells New Water	131261	51	$3,060,000	$66,919,213	
Golden Heart Utilities - Fairbanks	Valve Replacement Project	338161	50	$1,000,000	$67,919,213	WTR-BC
North Pole	Water Treatment Works Fire Pump Replacement	633311	50	$345,000	$68,264,213	ENG-BC
Soldotna	Soldotna Avenue Water Mainline Installation	791331	48	$443,000	$68,707,213	
Sitka	Halibut Point Road Water Main Rehabilitation	783461	48	$300,000	$69,007,213	ENG-BC
Valdez	Homestead Road Water Project	891031	48	$813,000	$69,820,213	
Craig	Raw Water Storage Improvements	265071	46	$600,000	$70,420,213	
Anchorage	Turnagain View Booster & Reservoir	131271	46	$255,000	$70,675,213	ENG-BC
Anchorage	Ship Creek Water Treatment Facility Roof	131281	46	$1,300,000	$71,975,213	ENG-BC
Anchorage	Tudor Road Bus Barn	131291	46	$514,000	$72,489,213	
Anchorage	41st Cope-Northstar Water Upgrade	131301	46	$1,402,500	$73,891,713	
Anchorage	Bayshore Subdivision Water Upgrade	131311	46	$1,700,000	$75,591,713	
Anchorage	CUI Reservoir Site Upgrade	131321	46	$850,000	$76,441,713	
Anchorage	SCWTF SCADA	131331	46	$425,000	$76,866,713	
McKinley View Estates - Anchorage	Stand -by Power Generation	131341	41	$22,500	$76,889,213	
Dawn Development Corp -Anchorage	Wellhouse and Distribution Upgrades	131351	41	$235,000	$77,124,213	WTR-BC
Anchorage	3000 Arctic HVAC Upgrade	131001	31	$900,000	$78,024,213	ENG-BC
Haines	Crystal Cathedrals Acquisition	265081	26	$247,900	$78,272,113	
Haines	Upgrade / Install Water Meters	265091	16	$260,021	$78,532,134	WTR-CAT
ALPAT Water Utility - Anchorage	Hydrant and Keybox Rehabilitation	131371	16	$248,100	$78,780,234	
Anchorage	Water Master Plan	131381	16	$425,000	$79,205,234	
Soldotna	Robin Street Water Mainline Installation Project	791341	13	$221,500	$79,426,734	
Soldotna	Centennial Park Water Mainline Installation	791351	13	$695,000	$80,121,734	
Soldotna	Harbor Terrace Lane Water Mainline Installation	791361	13	$185,000	$80,306,734	
Soldotna	East Beluga Avenue Water Mainline Installation	791371	13	$115,000	$80,421,734	
Soldotna	East Redoubt Avenue Water Mainline Installation	791381	13	$689,000	$81,110,734	
Skagway	Skagway Water Tank Project	785081	13	$94,000	$81,204,734	

* Green Project Reserve Category Type: GIF - Green Infrastructure, WTR - Water Efficiency, ENG - Energy Efficiency & EIN - Environmentally Innovative
Green Project Justification Type: BC - Business Case / CAT - Categorical.

APPENDIX V

Project Descriptions

ALASKA DRINKING WATER FUND

Project Descriptions

Fiscal Year 2011

ALPAT Water Utility

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Hydrant and Keybox Rehabilitation	131371	No	0	0	6	5	5	0	0	0	0	16

This project will rehabilitate 10 fire hydrants and approximately 40 Keyboxes

Anchorage

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Turnagain View Booster & Reservoir	131271	Yes	30	0	6	5	5	0	0	0	0	46

This project will design and construct an upgrade to the existing Turnagain View Booster Station and will take advantage of the planned Hillside Water Transmission Main supplying water via the 135th Booster Station to the 455 Zone and lower elevations in Turnagain View and north. The project will include the installation of more efficient booster pumps (2), PRVs as necessary, other electrical upgrades and SCADA reconnectivity. The project may also include the possible surplus of the adjacent 1.25 MG reservoir and disposal of excess property.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Island-Kodiak-Kalgin Water	131181	No	50	0	6	5	5	0	5	0	5	76

Increase to loan #127811- This project includes the area between 17th Avenue to the north, 20th Avenue to the south, Muldoon Road on the east, and Patterson Street on the west. This area presents a high rate of copper water service line failures. The scope of the upgrade project is study, design, and construction of necessary water upgrades to protect the project area water lines (mains and services) from the high rate of corrosion failure exhibited in the past. The work will include development of new design standards for the utility when working in corrosive soils in addition to corrosion, and stray current analysis to determine the cause of water service line failures.

Anchorage (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Tudor Road Bus Barn	131291	No	30	0	6	5	5	0	0	0	0	46

Replace approximately 650 LF of corroded 12" DIP with HDPE or PVC C-900 pipe south of Tudor Road and north of Campbell Creek, immediately west of the Elmore Road and Martin Luther Kind Drive (48th Avenue) intersection in Anchorage Bowl Grid SW1835. This project is located int he Municipal Tudor Road Complex Property.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Eagle River Heights Water Upgrade	131191	No	50	0	6	5	5	0	5	0	5	76

Increase to existing loan # 127551- This project located in Eagle River at the intersection of Colville St. and Baranoff Ave. consists of upgrading 2847 LF of existing transmission main with 8" pipe. The project serves 60 parcels off Colville St. and Baranoff Ave. and adjacent properties in the are. The upgrade work will abandon the existing main and replace it with 3800 LF of new 8-inch pipe located within the ROW. New water services will be constructed to the existing 60 parcels served by the transmission main. An additional 16-inch transmission inter-tie may also be constructed to provide additional reliability into the water distribution system in the area.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
3000 Arctic HVAC Upgrade	131001	Yes	0	0	6	5	5	5	5	0	5	31

Loan increase request for loan #130441- Upgrade the control system for the heating, ventilating, and conditioning (HVAC) system at the AWWU Headquarters Building: - Provide a new PC-based Direct Digital Control (DDC) system with color monitor; Provide a web-based DDC operator Workstation software package; connect the heating system to the new DDC system to allow for remote monitoring; control and alarming of critical system components; install a phase loss monitor and connect to the DDC system; re-balance all exhausts and supplies for the building

Anchorage (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
South Anchorage Water Extension	131241	No	30	0	6	5	5	0	5	0	0	51

Increase to existing loan # 127861- This project provides for the siting, design and construction of a new 5 million gallon water reservoir to serve the immediate areas of South Anchorage as well as the Anchorage Bowl as a whole. It will be located at an elevation of approximately 450 feet, and will be capable of being filled under a gravity head. The reservoir will work in concert with the other large reservoirs located at Service High School and near Kincaid Park. The intent is to locate this reservoir in close proximity to the Hillside Water Transmission Main to be constructed in Elmore Road south from Abbott Road to 135th Ave. Booster station.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Wonder Park Water Upgrade Ph I-IV	131251	No	30	0	6	5	5	0	5	0	0	51

Replacing approximately 3900 feet of 6-inch to 8-inch watermain and appurtenances in the Wonder Park Subdivision (Pine Street to Boniface Parkway, 6th Avenue to Glenn Highway) due to corrosion.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Well 7 Upgrades	130271	No	30	0	6	5	5	5	5	0	5	61

Increase to existing loan #130271- This project arose from the Well Onsite Disinfection Project for Wells 7, 10, 11, and 12. It was determined early on that the Well 7 site need additional work for facility upgrades, so it was determined it needed to be a separate project. Well 7 consists of Mechanical, Electrical, Structural and Landscaping upgrades. Specifically the work consists of conversion from chlorine gas to sodium hypochlorite disinfection, upgrading the well pump capacity and motor size and putting in a VFD, bringing the generator fuel storage tank into building compliance, demolishing the old well 7 building and constructing a larger building to accommodate the necessary upgrades.

Anchorage (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Ship Creek Water Treatment Facility Roof	131281	Yes	30	0	6	5	5	0	0	0	0	46

Providing an upgrade to the roof over the sedimentation and filter basins at the Ship Creek Water Treatment Facility.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Ship Creek Water Treatment Facility Upgrade	131231	Yes	30	0	6	5	5	0	5	0	0	51

This project encompasses several project types including new construction, upgrades to the existing system, energy efficiency via waste heat recycling, water efficiency via reduction of steam exhaust, and lastly a truly innovative environmental project. This project will reclaim additional waste heat from he Municipal Light and Power Plant 2 and transfer the heat into he cold water supply for Anchorage to prevent pipe freezing. The potential heat to be recovered by the proposed heat exchanger system that would otherwise escape to atmosphere amounts to about $3,000,000 per year. This project has the potential to sequester an additional 75-150MBTU of heat that would otherwise be produced as cooling tower waste heat through power generation. It will benefit both the customers of Anchorage Water Utility and the customers of Municipal Light and Power and has the potential to provide 100% thermal efficiency of the power generation waste stream.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Tidewater Gull Water Upgrade	131201	No	50	0	6	5	5	0	5	0	0	71

The project located in the Anchorage Bowl on Tidewater Rd. and Gull Ave. consists of upgrading 2,275 LF of existing transmission main with 16" pipe. This project will repair older pipes with a significant break history and reduce the operating costs by reducing maintenance needs for these pipes. The project serves five parcels on Tidewater Rd. and Gull Ave. and adjacent properties in the area.

Anchorage (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Oklahoma-Muldoon Water Upgrade	131211	No	50	0	6	5	5	0	0	0	0	66

The project located in the Anchorage Bowl near Oklahoma St. off Muldoon Rd. involves upgrading or abandoning existing 2" copper transmission mains with 8" pipe in three different locations: 306LF on Oklahoma St. between Dubine Ave, and 4th Ave. With acquisition of an easement this section of pipe may be abandoned in place and a new 8" mainline can be installed to serve the previously serviced lots. 343 LF on Patsy St: This 2" copper water main is along the back lot line of several residences. The main will most likely need to be removed and replaced with a 6-8" mainline. 219 LF on Idaho St: This copper main does not serve any lots that are not currently being served. There are no known service connections. This main may be abandoned. This project will repair older pipes with significant serviceability problems and bring the mains up to the current DCPM standards.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Old Glenn Highway Water Extension	130771	No	50	0	6	5	5	5	5	0	5	81

This is a loan increase for loan #127851: Extension of backbone water infrastructure in the Northern Communities area coordinated with planned improvements to the Old Glenn Highway. This portions of AWWU's Northern Communities Water Extension, Phase I project will construct approximately 2000 feet of 12-inch water distribution main within Fish Hatchery Road and Harold Loop to connect the distribution main being constructed within the Old Glenn Highway. This project will allow for the completion of the planned Phase I Extensions in the Northern Communities.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
41st Cope-Northstar Water Upgrade	131301	No	30	0	6	5	5	0	0	0	0	46

This project is located in the Anchorage Bowl and involves upgrading water distribution mains with 8" equivalent pipe in several locations along 41st Avenue, Cope Street, and Northstar Street. Specifically, along 41st Avenue to the intersection with Arctic Boulevard (928'); Cope Street between Tudor Road and 40th Avenue (1344'); North Star Street, between 40th Avenue and Tudor Road (1279'), in the alley by Cope Street north of Tudor Road (362'), and 41st Avenue and Wilson Street (1046').

Anchorage (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Water Master Plan	131381	No	0	0	6	5	5	0	0	0	0	16

The Water Master Plan (WMP) was last updated in 2005. Changes since that time to local economies, growth, development patterns, etc.;, in addition to the implementation of the past plan recommendations and reevaluation of future requirements are just cause to once again update the Water Mater Plan. The Water Master Plan document is an integral part of developing and guiding AWWU's Capital Improvement Program. It is a document that guides system upgrades and expansions as related to planned private development, other private water utilities, and identifies future facilities so that impacts by the Municipality of Anchorage, Alaska Department of Transportation and Public Facilities and other agencies can be planned. It is essential in the prioritization of projects and budget timelines. This plan is also used by other governmental agencies and throughout the private sector as a resource for identifying project collaboration opportunities and impacts.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Bayshore Subdivision Water Upgrade	131311	No	30	0	6	5	5	0	0	0	0	46

This project is located in the Anchorage Bowl within the Bayshore Subdivision south of 100th Avenue. This area has a history of shear breaks with over 10 emergency excavations and repairs made since 2002. The pipe in the subdivision is 6-inch cast iron and was installed between 1970 and 1974. This project will evaluate and replace up to 14,100 feet of water distribution main within the subdivision. This project will be a phased construction project to minimize the impacts to the neighborhood. The project is scheduled to begin design in 2011 with construction starting in 2012 and continuing until 2014.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
CUI Reservoir Site Upgrade	131321	No	30	0	6	5	5	0	0	0	0	46

This project is located within the Northern Communities in Peters Creek. AWWU purchased Chugiak Utilities in the early 2000's. CUI had one active well, one potential well, galvanized storage tanks, and an associated pump house located off Oberg road and Norton Circle. The wells and associated facilities need to be upgraded to current standards to allow these wells to continue to operate as backups during periods of high demand or in the event of a break on the Eklutna Line to supply water to the Peters Creek area. This project will also remove the galvanized storage tanks as they do no meet current standards. No new water storage is planned.

Anchorage (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
SCWTF SCADA	131331	No	30	0	6	5	5	0	0	0	0	46

This project will provide Supervisory Control and Data Acquisition (SCADA) to the Ship Creek Water Treatment Facility (SCWTF). AWWU has performed SCADA upgrades to the majority of its water treatment, storage, and distribution facilities over the last eight years. This project will evaluate, design and construct the necessary controls to automate the functions and optimize the performance of the SCWTF. This will include SCADA on the intake pipeline and automation of the filter backwash.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Wells New Water	131261	No	30	0	6	5	5	0	5	0	0	51

In order to meet future water demands as described in the 2005 Anchorage Water Master Plan and to meet demands in the event of an emergency, new high production water wells are needed in the Anchorage Bowl. This project will determine the location of a new high production water well, and design the well facility for construction once t he location is determined.

Craig

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Raw Water Storage Improvements	265071	No	30	0	6	5	5	0	0	0	0	46

The project will increase the height of an existing concrete dam at the city's source of drinking water at North Fork Lake. Each foot of increase in the height of the dam with increase the storage capacity of the lake by approximately 160 acre feet.

Crystal Cathedrals Water

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Storage Tank	395091	No	30	10	6	5	0	0	0	0	0	51

Assist in stabilization of chlorine residuals, pumping cycles, fire flow, a and distribution circulation by larger water storage facility.

Dawn Development Corporation

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Wellhouse and Distribution Upgrades	131351	Yes	30	0	6	5	0	0	0	0	0	41

Design and construction of a well house addition, upgrade of electrical service, the installation of a stand by generator, installation of a security fence, installation of a security fence, installation of remote monitoring, Leak detection and Major leak repair.

Golden Heart Utilities

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Illinois Street Reconstruction Project	338131	Yes	50	0	10	5	5	0	5	0	0	75

This project is being done in conjunction with State of Alaska DOT. The scope of the overall project is quite large and involves reconfiguration of Illinois Street, one of the main thoroughfares through downtown Fairbanks. State of Alaska DOT is funding the relocation and replacement of most of the piping in the Illinois Street corridor because the project will involve excavation of large sections of utility owned piping in order to accomplish the project objectives. In connection with this project, Golden Heart Utilities plans to replace several sections of water main services, fire hydrants and other appurtenances bordering the Illinois St. project corridor. The pipe to be replaced includes water main along Terminal St., North Cushman St., and North Turner St. An existing water main along Illinois St. will be rerouted through Denali State Bank parking lot also. Total footage of main to be of main to be replaced is approximately 2,200 LF. The existing thing gauge steel water mains and services in the affected areas were installed in 1954 and are approaching the end of it's service life.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Various Downtown Fairbanks Water Pipe Replacement	338151	Yes	50	0	10	5	5	0	5	0	0	75

This project is done in cooperation with the State of Alaska DOT and the City of Fairbanks. The overall scope involves several smaller reconfigurations of downtown Fairbanks. The ability to perform work downtown is extremely difficult due to limited access and traffic. It is very important to complete these types of projects in conjunction with the City and DOT. This project will replace water mains, services, fire hydrants and other appurtenances. State of Alaska DOT is funding the resurfacing of the roads. The pipe to be replaced includes water main along Cushman St. between 1st Ave. and Gaffney, Wickersham St. between 1st & 4th Ave. and 3rd Ave & 4th Ave. from Cowles and Barnette in different sections. Total footage of main to be replace is approximately 2,644 LF. The pipe is of various diameters. The existing thing gauge steel water mains and services in the affected areas were installed in 1954.

Golden Heart Utilities (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Valve Replacement Project	338161	Yes	30	0	10	5	5	0	0	0	0	50

This is the first year of a project we expect to complete over three years to repair or replace water main valves throughout the GHU system. There are 640 valves currently identified as inoperable. Over the course of the tree year project each valve identified as inoperable will be evaluated and repaired or replaced as appropriate depending on the nature of the malfunction, and site conditions. Valves in need of repair or replacement may necessitate site excavation, incidental pipe replacement to facilitate reconnection of new valves, backfill and reconstruction of roads and other similar structures.

Haines

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Crystal Cathedrals Acquisition	265081	No	0	0	6	5	5	0	5	5	0	26

The Haines Borough has a pending purchase agreement with the owner of Crystal Cathedrals Water & Sewer Systems, Inc. for the purchase of Crystal Cathedrals' water source, water treatment facility, water distribution system, and sewer collection system for $370,000. The water distribution portion of this purchase is $247,900.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
A/C Pipe Replacement	395141	No	50	0	6	5	5	5	5	0	5	81

This project will replace approximately 3,283 feet of 1950s era asbestos cement pipe on View Street, Fourth Avenue, and Lynnview Drive along with service connections to properties served by the line. The pipe would be replaced with 8" diameter AWWA C-900 PVC pipe.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Barnett Water Tank Replacement	395151	No	50	0	6	5	5	0	5	0	5	76

The existing 100,000 gallon Barnett Drive Water Tank is an old wood stave tank that has reached the end of its useful life. It is starting to leak more and more frequently and the foundation for the tank and the roof are starting to collapse. Additionally the tank is undersized to meet fire flow needs. This project would construct a new 500,000 gallon, insulated tank to replace the existing tank.

Haines (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Lily Lake Transmission Line	395101	No	50	0	6	5	5	5	5	0	5	81

The purpose of this project is to replace 9,600 fee of 8" ductile iron waterline. This line is the main drinking water supply for the Haines town site. The existing line was installed in 1972 and recent inspections reveal serious corrosion of the pipe. There have been two significant leaks in the last two years. In both occurrences, the leaks were in heavily corroded areas of the line and substantial decay was noted. With he current condition of the line, the potential for another incident is high. This could lead to significant health and safety risk if not corrected.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Upgrade/Install Water Meters	265091	Yes	0	0	6	5	5	0	0	0	0	16

This project will include replacement and new installations of water meters within the Haines Borough. Priority will be given to Commercial users and those areas where pumps are used to supply water.

Hoonah

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Hoonah Water Trans Replacement Phase II	411021	Yes	50	0	3	5	0	5	5	0	0	68

This project (phase II) funds the replacement of 25,100 feet of severely corroded and hydraulically undersized ductile iron water transmission line. The pipe leaks and is extremely sensitive to pressure changes. The water plant operator cannot shut off the flow int he transmission line during a water plant backwash cycle or else the line will break. Rather, the operator must open a "dump valve" to waste to keep water flowing continuously during the backwash process.

Juneau

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Salmon Creek Water Source Secondary Disinfection	445381	No	75	25	3	5	5	0	5	0	0	118

The project will add Ultraviolet Light Disinfection to the existing CBJ Salmon Creek Water Treatment Facility to comply with the US Environmental Protection Agency Surface Water Treatment Rule requirement to provide secondary disinfection of surface water sources which becomes effective in 2013.

Ketchikan

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Alaska Ave. Water Main Replacement Project	481131	No	50	10	6	5	5	5	5	0	0	86

Installing 1,725 feet of 8" HDPE water mains, with new water valves and fire hydrants, and a new water services installed to the edge of the Alaska Avenue right-of-way. This project will be performed in conjunction with a City of Ketchikan Public Works project to replace the aging sewer mains in the area. This project is part of a joint City of Ketchikan Public Works and KPU Water multi-year program to replace substandard, defective utilities simultaneously whenever possible. The frequency of failures in the ductile and cast iron water mains greatly increases the opportunity for infiltration and inflow (I&I) of potentially contaminated subsurface drainage into the drinking water system.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
4th & 7th Avenues, Jackson & Monroe Water Mains	481141	No	50	10	6	5	5	5	5	0	0	86

This project will install 4800-feet of 8-, 12-, and 16-inch water main along Jackson Street between Fourth Avenue and the Monroe/Lincoln Street intersection, along Fourth Avenue and Seventh Avenue to the Madison Street and College Avenue intersections (respectively), and along Monroe Street from Seventh Avenue to the Jackson St. intersection. This project will be performed in conjunction with a City of Ketchikan Public Works Department Project to replace sewer mains in the area. This will be another segment of a multi-year program jointly developed by KPU and General Government to replace substandard, defective utilities simultaneously wherever possible.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Baranof Reservoir Replacement	481121	No	50	25	6	5	5	5	5	0	5	106

Construction of a 750,000-gallon concrete water reservoir for the Baranof Pressure Zone to replace the existing 200,000-gallon wood reservoir. The site preparation phase for replacement of Ketchikan Public Utilities' Baranof Water Reservoir is presently under construction and funded as a Group 2 ARRA Eligible project with Loan subsidy. Rated by the State as the second highest project on the list, the contract for site development was issued in December of 2010. The present 200,000-gallon wooden reservoir is severely undersized, has localized rot, and is leaking badly. In 2007, KPU acquired property at a cost of $290,000 and authorized design of a new 750,000-gallon reservoir. The reservoir design is complete and approved for construction by ADEC. Funding is requested to begin construction during the summer of 2010 as soon as the site preparation is complete.

McKinley View Estates

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Stand-by Power Generation	131341	No	30	0	6	5	0	0	0	0	0	41

The project consists of installation of Stand-by Power Generation and remote monitoring system.

North Pole

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Water Treatment Works Fire Pump Replacement	633311	Yes	30	0	10	5	5	0	0	0	0	50

The water treatment plant diesel-powered fire pump is over 25 years old. In October 2008 when the pump engaged after a fire hydrant was opened, the drive shaft in the pump fractured. It took four months for a replacement to be fabricated leaving the treatment works without a functioning fire pump. The nature of the fire pump is it powers up instantly and momentarily exerts water hammer as high as 140 psi before the pressure valve moderates the pressure. The section of the circulation system that receives the full impact of the water hammer is 40+ year old steel water mains. These steel water mains are the City's water mains that are those most prone to failure due to excessive pressure. Replacement of the fire pump will include a new clay valve and flow meter to lessen the affect of water hammer on City's water mains. The project will require engineering and design services to properly size a replacement pump, associated piping and controls.

Palmer

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Steel Water Main Replacement	677221	Yes	50	0	6	5	5	5	5	0	5	81

There are approximately 17,000 LF remaining of thin-walled steel pipe within the City of Palmer Water Utility system. The City has identified three projects which will complete the replacement of the old steel water mains financed by ADEC in phased grants for the City of Palmer. The three remaining projects are Gulkana, Bonanza, and Sherrod Area Water and Street Improvements. The 2010 improvements are Gulkana, Bonanza and the Sherrod project will include the remaining 2011 and 2012 improvements as one project. The City has entered into a contract for the construction of the Gulkana project on December 17, 2009. Engineer drawings were approved by ADEC in November 2009 for the Bonanza project though it was put on hold due to funding. The Bonanza project is ready to bid as funding is secured. On January 13, 2010, a leak was discovered on W. Dolphin Street which is scheduled to be replaced in the Bonanza project and declared an emergency on February 9, 2010. Last year the City declared Alaska Street an emergency project due to corrosion and abrasion which is causing ruptures and catastrophic failures. Currently we realize a 41% loss in our distribution system.

Palmer (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Southwest Utility Expansion Phase IIb	671301	Yes	30	0	6	5	5	5	5	5	5	66

The City of Palmer currently provides water and sewer to the new Mat-Su Regional Medical Center. That area is developing rapidly and is in need of an additional production well and water storage reservoir of 1 million gallons. The new production well and water storage could also serve the nearby Matanuska-Susitna College with City utilities. The Matanuska-Susitna College has high arsenic levels in their water system and is interested in connecting to City utilities to reduce treatment costs. This expansion will provide 10,000 LF of new water distribution mains adjacent to the Trunk Road Realignment. The City has been coordinating with DOT for the contractor to install water lines in the right of way.

Petersburg

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Water Treatment Plant Upgrades Phase 3	685241	No	75	25	6	5	5	5	5	0	5	131

Phase 3 of the Water Treatment Plant Upgrades project will be the final phase of this project. Items being accomplished in this phase include filter tank interior recoating, underdrain system replacement/upgrade, filter media replacement and backwash system upgrade to use air scour. Also included in the project will be the installation of a cover over the clear well tank which is used as the source for backwash water.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Petersburg Water Upgrades Project	685251	Yes	50	0	6	5	5	0	5	0	0	71

This project will serve to upgrade aging asbestos cement water and sewer lines in Petersburg, reducing treated water loss and cross connection potential in the distribution system.

Sitka

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
UV Disinfection Facility	783431	Yes	75	25	6	5	5	0	5	0	0	121

The enhanced surface water treatment rules (ESWTRs) were issued by EPA requiring drinking water systems to provide additional microbial and disinfection controls for surface water systems. The Long Term 1 & 2 ESWTRs require public health protection against Cryptosporidium, while addressing risk tradeoffs with disinfection by-products. This additional treatment must be in operation and individually validated by the State DEC before October 1, 2014. CBS disinfects with Chlorine alone, so must add additional disinfection to comply with the Federal regulations and protect the public from Cryptosporidium.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Waterline Loop System to Japonski Island	483451	Yes	30	0	6	5	5	0	5	0	0	51

The existing 12" water line suspended under the O'Connell Bridge to Japonski Island has suffered corrosion under it's insulation and during the last bridge inspection water was found dripping from the insulation from a leak in an undetermined location. The water line needs to be replaced- either on the bridge or submarine below the bridge- to maintain a looped water system for Japonski Island. The replacement will be a 16" water line for increased capacity and reduced pressure loss.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Monastery Street Water Main Rehabilitation	783441	Yes	50	10	3	5	5	0	0	0	0	73

Replacement of the existing 6-inch cast iron (exact mater type unknown) water line with a new larger diameter ductile iron pipe or HDPE main, and replacement of services in Monastery Street Right of Way. The project will also provide ADEC required separation distances between water, storm and sewer system, which currently has less than the required 10 foot separation. This project must be in conjunction with the ACWF project for Monastery Street to attain the 10 foot separation. The project will connect to the Oja Street project currently fully funded and scheduled for construction this summer. The project will also connect to the Sawmill Creek Road improvements scheduled for 2011 to coincide with the Alaska DOT road improvements.

Sitka (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Halibut Point Road Water Main Rehabilitation	783461	Yes	30	0	3	5	5	0	5	0	0	48

The project includes three renovations of the water system within Halibut Point Road prior to the repaving of the roadway by ADOT in 2011. Two of the renovations include realigning the existing 12 inch water main out of the current alignment in the beach to be within the Halibut Point Road Right of Way. These realignments are required to make the pipe accessible for repair. The current alignment can no longer be access due to erosion of the beach. The first location is at Cascade Creek where approximately 100 to 200 feet of pipe is to be hung on the Cascade Creek Bridge. The second location is near the Channel Club restaurant where approximately 700 feet of the 12" main is to be relocated so it can cross the creek attached to the expected new crossing at the creek near the Channel Club and Harbor Mountain Bypass Road. The third renovation is the replacement of two 2-inch service lines to the Vennetti trailer park with two 6-inch service lines tot he edge of the Right of Way.

Skagway

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Skagway Water Tank Project	785081	No	0	0	3	5	5	0	0	0	0	13

To construct a water tank for storage and capacity. It is a wooden tank that has been purchased and is in storage- 250,000 gallons. The project consists of setting the base to the water tank can be erected.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Soldotna Avenue Water Mainline Installation	791331	No	30	0	3	5	5	0	5	0	0	48

This project would connect the water mainline from the Birch Street/Soldotna Avenue intersection to the East Redoubt Avenue/Soldotna Avenue intersection, a distance of approximately 1,200 LF. Looping of this line should help assure consistent water quality and minimize freezing potential. This street is in the middle of town, zoned commercial and has no piped City water service.

Soldotna

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Well House "B" Reconstruction Project	791321	Yes	30	0	3	5	5	5	5	0	0	53

This project is the last water well house improvement project scheduled for the City of Soldotna, all of the other well houses have been, or are in the process of being upgraded. This project includes: demolition and reconstruction of the well house, converting the existing well pump and motor to variable speed controls, upgrading of the SCADA system, installation of an onsite chlorine generator, evaluation of the water distribution system that this well feeds into and other water system improvements.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Robin Street Water Mainline Installation Project	791341	No	0	0	3	5	5	0	0	0	0	13

This project would extend the water mainline from the Robin Street/ East Redoubt Avenue intersection to Robin Street's south end, a distance of approximately 750 LF. This gravel street is in the middle of town, zoned commercial and has no piped City water or City waste water service. There is a companion sewer mainline project.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Centennial Park Water Mainline Installation	791351	No	0	0	3	5	5	0	0	0	0	13

This project would extend the City water mainline system into a portion of Centennial Park. The scope of the work is anticipated to include providing piped City water to the easterly side of the park (that part of the park along and east of the main entry road). Currently, users of the park either fill up their RV water tanks prior to entering the park or fill up at our well house. There is no distribution system that serves individual users at the park. There is a companion sewer mainline installation project.

Soldotna (Continued)

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Harbor Terrace Lane Water Mainline Installation	791361	No	0	0	3	5	5	0	0	0	0	13

This project would extend the water mainline from the Funny River Road/ Harbor Terrace Lane intersection to the cul-de-sac at its northerly end, a distance of approximately 1030 LF. Half the properties along this street are adjacent to the Kenai River and there are several lodges located on this street. There is a companion sewer mainline project.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
East Beluga Avenue Water Mainline Installation	791371	No	0	0	3	5	5	0	0	0	0	13

This project would extend the water mainline from the Robin Street/ East Beluga Avenue intersection to the Birch Street/ East Beluga Avenue intersection, a distance of approximately 650 LF. This gravel street is in the middle of town, and has no piped city water service. There are dwellings that are using on-site wells on this street. There is a companion sewer mainline installation project.

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
East Redoubt Avenue Water Mainline Installation	791381	No	0	0	3	5	5	0	0	0	0	13

This project would extend the water mainline from its current location on the west side of Soldotna Creek to the East Redoubt Avenue/ Swiftwater Park Road intersection, a distance of approximately 1,400 LF. This is the second step in a continuing effort to supply piped City water services to this rather large area within city limits. There are many dwellings that are using on-site wells on this street as well as on numerous cross streets. There is a companion sewer mainline installation project.

Valdez

Project Name	Project Number	Green Project (Yes/No)	Public Health	Comply Criteria	Affordability	Cert. Op.	Additional Consideration					TOTAL
							Debt Retire.	Constr. Doc.	Eng. Feas. Study	Regional or Consolidate	Env. Review	
Homestead Road Water Project	891031	No	30	?	3	5	0	5	5	0	0	48

This project will install approximately 3,000 LF of water line to connect two subdivisions on Homestead Road to the city water system. Project area is a mix of residential and commercial development.

APPENDIX VI

Public Comments

During the public comment period, two communities notified ADEC on the need to remove projects from the Priority and Planning lists, deobligate an existing loan, or note projects that are basically for funding increases. These comments are summarized as follows:

- The North Slope Borough (NSB) requested to have the following projects removed from the SFY 2011 ADWF project funding lists:
    - Ahgeak Street Water Extension
    - Pt. Lay Water Tank Repairs
    - Pt. Lay Freshwater Lake Protection
    - Kaktovik Water Service
    - Pt. Lay Above Grade Service Connections
    - Pt. Hope Water Service

  In addition, NSB requested that the ADWF loan #635161 – Wainwright Water Upgrades for an amount of $6,000,000 be fully deobligated. The deobligated amount was added to the total available project amount under this IUP for funding more projects under the Priority Project List.

- Anchorage noted a group of projects listed on the IUP funding lists that are actually for increases on existing ADWF loans.