

REBUILD EAGLE CITY FIVE-YEAR ENERGY AND RESOURCE USE ACTION PLAN

REBUILD IDAHO Draft – June 21, 2000

PRIORITIES, GOALS, AND ORGANIZATION

Introduction

The City of Eagle is participating in the Rebuild Idaho program through the formation of a city partnership (the Partnership).

The Partnership agrees that this is a dynamic rather than a static five-year plan and sets the intention that changes will be made as opportunities and priorities develop. As a reflection of this dynamic nature, the city will develop an annual strategic plan that identifies clear actions, timelines and resources for implementation.

It is anticipated that many organizations share the city's priorities and goals under the Rebuild Idaho program including; 1) energy utilities; 2) building contractors and developers; 3) schools; 4) private businesses; 5) church groups; and 6) architects and engineers. There are a number of incentives that may encourage these organizations to participate in the Rebuild Eagle City program. The Partnership will look into development of an award program for its partner organizations, and press releases in the local paper will be utilized to promote successful ventures.

This plan will assist the Partnership in identifying cost-effective and economically sustainable energy and resource efficiency priorities for city buildings.

Vision Statement

Five years from now the City of Eagle will have increased the quality of life for its citizens through planned growth that provides for development of clean business, new public transportation strategies, and energy efficient buildings. We will maintain our small town ambience as we transition into a complete city where citizens can live, work, and recreate without leaving the community.

During the next five years the Partnership will actively pursue a program to identify and implement methods for controlling utility costs and maintaining building efficiency and a safe and healthy environment for building occupants and community citizens.

The Partnership wishes to demonstrate to employees and the community that public buildings are

being operated in a cost-effective manner, saving resources and maximizing the use of tax dollars. The community believes that actions undertaken under the Rebuild Idaho Program are wise investments and will benefit all the citizens of the community. Our vision is to make “energy and resource efficiency” a key issue for operating and maintaining our buildings.

Program Goal

The goal of the Rebuild Eagle City program is to utilize energy and resource efficiency measures as one means to increase community economic health and viability, maintain building occupant comfort and safety, and protect the natural environment. We will achieve this through the identification and implementation of specific objectives and actions that fit into our rural culture.

Major Objectives

Year 1 Objectives

1. Ensure that new residential and commercial development follows good energy efficiency standards.
2. Ensure that buildings are safe, comfortable, and provide a good working environment for occupants.
3. Expand the city program to the community as successful energy and resource saving strategies are documented.
4. Educate building owners and occupants to facilitate energy-efficient behavior. Utilize the Chamber of Commerce as a resource.
5. Identify and describe building operation and efficiency changes that require action.
6. Develop a systematic approach to accurately measure energy efficiency and to develop a phased approach for efficiency implementation.

Five-year Objectives

7. Maintain adequate capacity for expansion of water and sewer.
8. Control urban sprawl.
9. Develop new strategies for funding and maintaining our infrastructure.
10. Develop an efficiency-based economic platform that will enable new and existing business growth.
11. Implement a community building energy and resource use awareness campaign.

Focus on business owners.

12. Utilize energy and resource savings for other building and partnership purposes.
13. Add comfort and value to existing buildings and systems without increasing existing utility costs.
14. Ensure that new buildings follow good energy and resource efficiency practices.
15. Seek to decrease air and water pollution through building energy and resource efficiency.

Accomplishments to Date

A two-year energy use database has been established utilizing utility management software. Partnership savings and success will be evaluated from this base. A building characteristic study has been performed.

Partners and Organization

The Partnership is a collaboration of public and private partners within the City of Eagle, Idaho. The primary intent of the Partnership is to provide a safe and comfortable environment for building occupants, and to establish positive economic development opportunities within the community through energy and resource savings.

The Idaho Department of Water Resources Energy Division (Rebuild Idaho), will assist the partnership as follows:

1. Recommend operation and maintenance, resource, and efficiency changes;
2. Provide utility management software and training;
3. Research the availability of program funds or services;
4. Facilitate and develop the five-year energy and resource efficiency plan, and first-year strategic plans with the Partnership;
5. Under contract, procure a characteristic survey of city buildings.

Building occupants, though not specifically listed as a partner in the Partnership, are important to the program. Their behavior, such as turning off unused lights and equipment etc., can reduce building energy use by 10%, a significant contribution to facility expenditure reduction.

The City of Eagle will maintain the utility management database throughout the five-year program, seek to develop a budget line for energy conservation measures, and follow recommended operation and maintenance procedures. The city intends to pursue cost-effective options for energy and resource savings.

Idaho Power Company can provide limited technical assistance to the city and monthly electric

data.

Current Partners

City of Eagle

Rick Yzaguirre, Mayor

Idaho Dept. of Water Resources, (Rebuild Idaho)

Sue Seifert, Rebuild Idaho Program Lead

Ken Baker, Energy Specialist Principal

Pat Gleason, Energy Specialist

Idaho Power Company

Blake Watson, Customer Representative

Challenges

The Partnership believes the following identified challenges are also opportunities for the community. Potential challenges to effective program implementation include:

- Citizens sometimes do not understand either the current amenities available or those that are possible within the community;
- Ada County may have requirements that restrict aspects of program implementation;
- New jobs need to be developed;
- Recruiting and maintaining business;
- Alternative transportation strategies need to be created;
- Regional pacts can overwhelm small communities;
- The community identity has not been marketed.
- School district may not participate in the program.

CANDIDATE BUILDINGS

Utility management software will be utilized to establish a base for building energy and resource use. This data will be utilized to identify buildings with high utility costs and can assist in identifying strategies for potential energy and resource reduction.

Four key criteria were determined for selecting candidate buildings:

1. Potential for dollar savings
2. Condition of existing equipment
3. Projects with the most visual impact
4. Projects that demonstrate community partnership

Existing candidate buildings are listed on the following table:

City of Eagle

Building	Square Footage	Priority for Action
Annex	960	
City Hall	3,000	
Fire Station #1	6,000	
Fire Station #2	3,760	
Library	16,800	
Old Library (Museum)	1,620	
Senior Citizen Center	3,000	
Sheriff Department	900	
Total	36,040	

RETROFIT OBJECTIVES

Retrofit projects that are designed to increase the efficiency of building systems will positively affect concerns that are important to the community partnership. Concerns such as:

1. Building safety
2. Comfort and productivity of occupants
3. Reductions in system failures
4. Expansion of anticipated life-cycle or intended use
5. Reduced maintenance and utility costs
6. Increased employee productivity
7. Indoor air quality

Building retrofits can procure savings that enable the partnership to purchase new equipment, add new employees or expand existing programs.

In most circumstances, when retrofit objectives are identified in advance, the objectives can be incorporated and completed with other remodeling projects and building additions.

Targets and Time Frames

Actions and timelines are identified in one-year strategic plans developed individually by the city.

BUILDING ASSESSMENTS, ENERGY CONSERVATION MEASURES, & OPERATIONS AND MAINTENANCE

Operations and Maintenance:

The Department will provide the Partnership with a list of general low to no-cost operation and maintenance (O&M) options that will increase building efficiencies when put into practice. In addition, building assessments will identify specific building by building O&M's for maintenance staff implementation.

Building Assessments:

To begin full Partnership building assessments, initial building prioritization will be performed utilizing software designed for that purpose. Up to two-years of energy and resource data, electricity, natural gas, garbage, sewer, and water will be entered into utility management software. This base data will be used to determine potential cost-saving measures, and to evaluate future energy and resource use and savings.

A building characteristic survey will be performed on all city buildings. This survey will identify each building and utility meter along with a full list of characteristics. This information will assist the Partnership in establishing a base from which to apply the four candidate building criteria.

The Partnership may consider utilizing a combination of an energy service company (ESCO), serving utility, and engineering services, for building assessments. Assessments will be conducted on the candidate Partnership buildings identified in the plan. Assessment priority will be based on utility management data, computer analysis, partner needs and financial capabilities. Once assessments are completed, buildings will be selected for retrofit action. The selection criteria includes:

1. The potential for building energy savings
2. An estimate of time and dollars needed to perform the measures
3. The availability of time and resources to devote to the project
4. The potential of installing effective building ECMs (energy conservation measures).

Building assessments will be an in-depth analysis of the whole building including:

1. Lighting and control systems
2. Building envelope
3. Engineering analysis of building mechanical systems such as pump air flows, and equipment operating efficiencies
4. Metered water use
5. Sewer billing
6. Solid waste generation rates

An assessment report will include but is not limited to the following:

1. Recommended ECM's
2. Life Cycle Costing optimization where appropriate
3. Calculation of ECM simple payback
4. Identification of existing operating efficiencies
5. An estimated cost for ECM implementation
6. Identification of funding options to measure implementation
7. Identification of Operations & Maintenance's (O & M's)
8. Recommendation to reduce water consumption
9. Recommendation to reduce sewer bills
10. Recommendation to reduce solid waste generation rates

An assessment report will be prepared with recommendations for ECM actions for the Partnership's consideration.

COSTS AND RETURN-ON INVESTMENT

The partnership anticipates that implementation of operation and maintenance (O&M) changes and energy conservation measures (ECM's), will produce a 15 to 25% reduction in total electrical, water, and natural gas energy use.

ACTIONS AND RESPONSIBILITIES

The City of Eagle will support their Partnership through the provision of staff time and will consider a line-item budget for energy conservation measures. The Partnership will observe the progress of Rebuild Caldwell emulate successful aspects of their program.

Rebuild Idaho will be the lead facilitator in the development of the community partnership action plan. In addition, Rebuild Idaho will:

1. Provide utility management software and training to the Partnership;
2. Retain contact with the Partnership throughout the five-year plan period and, at the partnership request, lead process in the development of new actions and strategies;
3. Assist in the development of a monitoring and verification plan as necessary;
4. Facilitate communication between the Partnership and other Idaho partnerships;
5. Promote the Partnership locally and nationally;
6. Make available the Energy Division's 4% loan program for commercial buildings;
7. Procure under contract two years of utility baseline data and a list of Partnership building characteristics.

Idaho Power Company will assist the Partnership by providing walk-through audits upon request. They will also provide account data in a format that can be efficiently downloaded into the Utility Manager software.

Products and services available through the national Rebuild America program will be identified during the first six months of plan implementation.

MONITORING, EVALUATION AND REPORTING

Data on monthly energy use will be compiled for the Partnership to establish a baseline of energy use for buildings. A monitoring and evaluation plan will be developed utilizing the Utility Manager software that will document actual energy use for each partnership building. This data will be used to assess post-improvement performance of retrofitted buildings. Reports summarizing energy, resource and cost savings will be prepared and presented annually to the City Council. Monthly Utility Manager files will be forwarded via e-mail to Rebuild Idaho program staff for assistance in program analysis.

PROMOTION AND EXPANSION

Through formation of a Rebuild Idaho Partnership, the City of Eagle is providing a platform for positive community economic development and sustainability. Rebuild Idaho will assist the Partnership in developing a plan for promoting and expanding the Partnership locally and nationally through implementation of the program. Rebuild Idaho will promote the Partnership savings and successes through the national Rebuild America program and publications, and through publication in the Department's Currents newsletter and press releases. Case studies may be developed for distribution and publication on the Department's Rebuild web site. Local press releases will be utilized for marketing program implementation successes.

FISCAL YEAR REPORT AND YEARLY STRATEGIC PLAN

The Partnership will produce a yearly report that outlines the progress and successes of their program. The report shall be presented to the City Council at a pre-determined public meeting. Information contained in the report may be used by the Rebuild Partners in newsletters and publications to promote the program.

Each year the Partnership will create a strategic plan, describing specific strategies and actions that will be undertaken during the upcoming year.