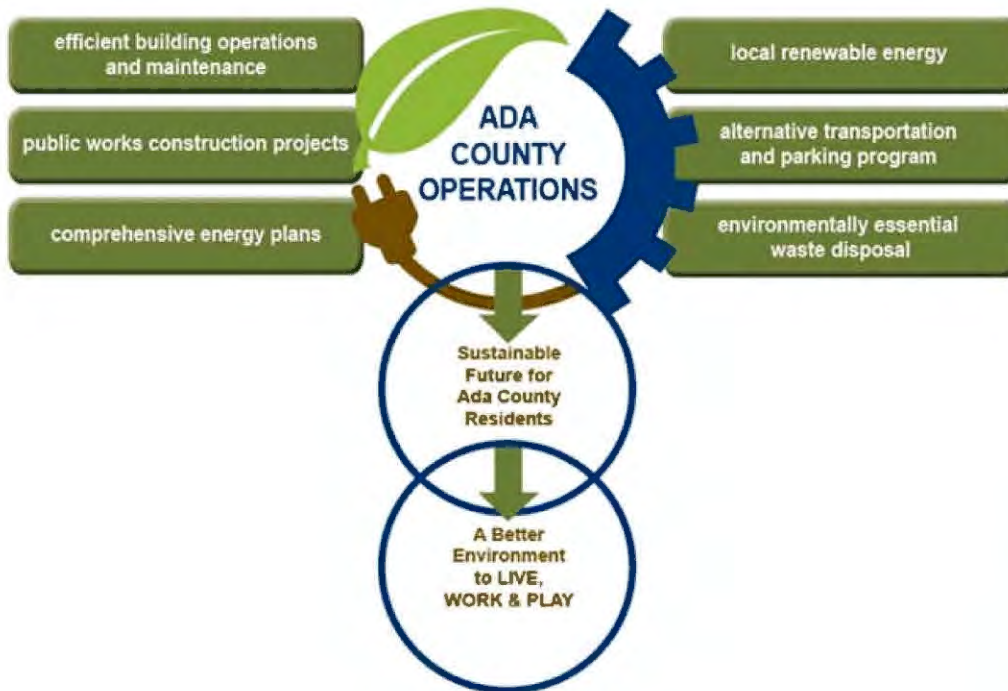




Strategic Plan for Sustainable Operations and Resource Conservation

Fiscal Year 2016 - 2017



**ADA COUNTY
OPERATIONS**

Strategic Plan for Sustainable Operations and Resource Conservation



VISION

To effectively and responsibly manage Ada County's resource use and conservation practices while being good stewards of the environment. To maximize social and economic possibilities by providing a safe, productive, and sustainable working environment for County employees.

MISSION

Expanding on the mission of Ada County Operations, the mission of the Sustainable Operations and Resource Conservation (SORC) plan is to implement creative, cost-effective strategies to control resource use, save tax dollars, and meet the demands of a growing population without compromising the needs of future generations through a partnership of people, policies, and actions.

PHILOSOPHY

Sustainability can be described in a variety of ways. According to the Environmental Protection Agency, "Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony that permits fulfilling the social, economic and other requirements of present and future generations." Sustainability is most often defined as "using resources to meet the needs of the present without compromising the ability of future generations to meet their own needs."

Current trends demonstrate the need to create healthy, safe, and sustainable communities. Ada County recognizes that being as

SORC -
Sustainable
Operations
and
Resource
Conservation

resource efficient as possible is essential to stay ahead of the curve to control costs and maintain our status as good leaders.

With the long-term success and health of Ada County in mind, it is our commitment to lead by example and incorporate sustainability into the daily operations of Ada County by proactively identifying and implementing methods that improve building efficiency, lessen energy consumption, reduce waste, and conserve natural resources. The strategic plan establishes Ada County's conservation and resource use goals and initiatives for all Ada County-owned facilities.

With over 1600 employees and more than 1.3 million square feet of County facilities, wise use of resources in public buildings will effectively reduce utility bills while creating a healthy indoor environment for building occupants. We also believe that energy-efficient building design and construction practices, countywide recycling programs, and the proper disposal of waste within the County will improve the community's environment. These benefits cannot be realized without the support of staff across our organization. The SORC Plan Partnership consolidates Ada County's commitment to the environment and provides for public participation in the process.

A healthy environment is directly related to the efficient use of natural resources via energy-efficient building design and construction and responsible operating practices. Ada County demonstrates to employees and the community that its buildings are operated in a cost-effective manner, saving resources and tax dollars. Management and staff work together to accurately measure energy efficiency and develop a phased approach for efficiency improvements.

OVERALL OBJECTIVES

The objectives of the SORC benefit all citizens of Ada County and should meet the needs of the County Commissioners, Elected Officials, department heads, employees, maintenance staff, and all County building occupants.

ADMINISTRATIVE

- Align Ada County's overall mission to serve the public good with expanding and growing the concept of sustainability
- Promote and facilitate the Ada County SORC Plan Partnership
- Establish benchmarks to foster the development of precise, tangible goals that can be quantitatively monitored and measured with set indicators and outcomes

BUILDINGS, ENERGY USE, AND RENEWABLES

- Build, operate, and maintain high performance buildings to ensure that conservation and responsible resource use remains a priority for Ada County
- Create healthy work spaces for optimal occupant health and comfort
- Limit, control, and lower utility costs
- Explore a Revolving Energy Fund to use energy savings for future projects
- Promote and expand the use of renewable energy within the County

TRANSPORTATION AND FUEL

- Decrease emissions and fuel consumption from county-owned vehicles
- Promote infrastructure development and use of alternative fuels
- Promote alternative transportation for county employees
- Support the Parks and Waterways Department in maintaining bike paths and trails within the county

PROCUREMENT, RECYCLING, AND WASTE MANAGEMENT

- Coordinate with the Procurement Department to adopt environmentally preferable purchasing (EPP) practices
- Assist Information Technology in developing best management practices (BMP)'s for equipment purchases
- Increase recycling rates and promote waste reduction in County operations
- Improve and expand options for recycling at the Landfill

OUTREACH AND EDUCATION

- Create a Best Practices Plan for cleaning services, landscaping crew, and building occupants on resource use and energy conservation and share with stakeholders
- Promote sustainability internally to County employees throughout all departments
- Proactively promote public image and sustainability initiatives externally to Ada County residents
- Foster peer exchange through meetings with other counties, building owners, maintenance staff, etc. to share ideas

ISSUES AND CHALLENGES

Following are major issues and challenges affecting the organization, now and in the future. They are potential barriers to effective program implementation:

- Successfully engaging SORC Plan Partners and County employees in the implementation of strategies and goals
- Appropriation of adequate resources, staff, partners, and dollars to produce effective and timely implementation of measures
- Increasing utility costs and limited funds available for projects and programs
- Population growth increasing demands on facilities and driving up maintenance costs
- Allocating sufficient resources for the Preventative Maintenance Program to keep building systems operating at maximum efficiency
- Providing advanced training for building operators to maintain highly engineered, specialized building systems

ORGANIZATION AND RESPONSIBILITIES

The Partnership is supported from the top down beginning with the Board of Ada County Commissioners. Financial support comes through the established County budgetary process. The continuing planning process is designed to bring on-going support from partners and other stakeholders as they are identified.

Director of Operations

The Director of Operations is the lead for the County Partnership. The Director provides the focus, leadership, staff and monetary resources to support the development and implementation of a successful program.

Energy Specialist

The Ada County Energy Specialist reports to the Director of Operations and is the lead for updating and implementing the County's action plan. Responsibilities also include:

- Maintaining utility management software and databases
- Tracking utility costs and rate changes for budgeting purposes
- Recommending operation and maintenance, resource, and efficiency changes
- Providing measurement and verification reports for retrofit projects
- Coordinating project and data requirements for LEED certification
- Tracking energy generation and revenue from renewable energy projects

Building Maintenance and Custodial Staff

County building maintenance and custodial personnel are responsible for carrying out the day-to-day operation and maintenance activities and are involved in the development and implementation of planned activities which can produce significant cost savings.

Building Occupants

Each building occupant is important to the success of the program, though not specifically listed as a partner. Behavior such as turning off unused lights and equipment etc., can reduce building energy use by 10% and significantly reduce energy costs.

Plan Partners

Plan Partners are specifically recruited and selected from County departments and outside businesses to bring their particular expertise and experience to the program. Each partner is requested and challenged to assist Ada County in determining both short and long range goals and objectives that can be accomplished.

As Energy Plan Partners, they may provide program recommendations, technical support, or resources and services that are both in-kind or for pay. Partners may use portions of the plan or the information contained in it for newsletters and publications to promote the program and their contributions towards its success.

CURRENT PLAN PARTNERS

Ada County Staff

Bob Batista
Dawn Burns
Dave Case
Doug Cox
Rick Emerson
Jean Fisher
Angie Gilman
Ted Hutchinson
Scott Koberg
Bruce Krisko
Kate McGwire
Meg Leatherman
Larry Maneely
Selena O'Neal
Stephen O'Meara
Bob Perkins
Larry Reiner
Adam Schroeder
April Theberge
Jim Tibbs
Rick Visser
Darby Weston
Scott Williams
Mike Work

Department / Position

Director of Expo Idaho
Director of Juvenile Court Services
Board of Ada County Commissioners
Operations, Construction Manager
Operations, Facility Maintenance Superintendent
Family Advocacy Cntr & Education Svcs (FACES)
Development Services, County Engineer
Solid Waste Management, Landfill Manager
Director of Parks and Waterways
Deputy Director of Operations
BOCC Public Information Officer
Director of Development Services
BOCC Chief of Staff
Operations, Energy Specialist
Director of Information Technology
Director of Purchasing
Trial Court Administrator
Director of Weed, Pest, and Mosquito Abatement
Director of Indigent Services
Board of Ada County Commissioners
Board of Ada County Commissioners
Director of Paramedics
Director of Operations and Solid Waste
Operations, Maintenance Manager

Business Partners

Greg Allen
Ken Baker
Craig Caldwell
Doug Cooper
Elizabeth Cooper
Karen Danley
Dave Fisher
Ken Gallegos
Jami Goldman
Roger Greaves
Jon Gunnerson
Geoff Johnson
Bill Kissinger
Rachele Klein
Jeff Osterman
Melanie Pinkston
Scott Pugrud
Scott Roberts
Brad Ware
Brian Wewers
Mike Wisdom

Company / Organization

Hummel Architects
K energy Consultant
CH2M Hill
McKibben+Cooper Architects
Integrated Design Lab
Stakeholder and County Resident
Republic Services
LCA
City of Boise, Public Works
Suez
City of Boise, Public Works
Eidam & Associates
ATS Inland NW
Republic Services
CH2M Hill
Idaho Power
Idaho Office of Energy Resources
CTA
Intermountain Gas Company
Idaho Power
Engineering Inc

ANNUAL STRATEGIC PLAN REVIEW

The County relies on its in-house expertise along with local business partners such as utility representatives, architects, engineers and other local professionals to provide input from their unique perspectives and ensure a more comprehensive plan. The business partners include professional service and business organizations that have an investment in the community. The Partners meets annually to review the goals and tasks planned for the fiscal year. The plan is reviewed at a predetermined public meeting where updates are also provided on the accomplishments and successes achieved in the previous year.

COUNTY FACILITIES

Ada County owns and operates diverse portfolio of buildings to provide a variety of services to the general public, along with office space for its employees. Each facility is continually monitored and assessed, on an individual basis, to identify ways to make them more energy efficient.

Major County facilities:

- ❖ Courthouse and Administration Building
- ❖ Public Safety Building and Field Services
- ❖ County Jail, Medical Unit, and Work Release Center
- ❖ Juvenile Court Services and Detention Facility
- ❖ Barber Park Administration Building, Raft Rental, and Event Center
- ❖ Expo Idaho (Western Idaho Fairgrounds)
- ❖ Solid Waste Management Landfill Office and Hazardous Waste Building
- ❖ Weed, Pest, and Masquito Abatement Facility
- ❖ Morris Hill Morgue and Storage Facility
- ❖ The Justice Center / FACES
- ❖ Benjamin Bldg: Elections, Vehicle Licensing, Adult Drug Court, Juvenile Programs
- ❖ Paramedics Administration and Training Facility
- ❖ Paramedics Emergency Medical Stations
- ❖ 911 Dispatch Center

Energy Tracking and Reporting

Monthly utility billing information for electricity, natural gas, water, sewer, and trash is entered in Utility Manager software to establish a baseline of energy use for each building. The data is used to identify and prioritize buildings with high utility costs, determine potential energy-saving measures, evaluate future energy and resource use and savings, and assess post-improvement performance of retrofitted buildings.

Energy Use Index

An Energy Use Index is published for the major facilities to measure its energy performance on a per square foot basis. It is used to establish baseline energy consumption and quantify subsequent savings from Energy Conservation Measures. A current energy use index can be found in the section on Buildings and Energy Use.

Building Assessments

Building assessments may be conducted on the County buildings using a variety of resources. Assessments identify specific building-by-building O&M's for maintenance staff implementation. Priority is based on analysis of utility data, County needs, and financial capabilities.

Selection criteria for building assessments:

- ❖ The potential of implementing effective ECMs that result in building energy savings
- ❖ An estimate of time and dollars needed to perform the measures
- ❖ The availability of time and resources to devote to the project

Assessments include an in-depth analysis of the whole building including the building envelope, lighting and control systems, engineering analysis of mechanical systems such as air flows and equipment operating efficiencies, metered water use and sewer billing, and trash records.

Under the direction of the Energy Specialist, a contract engineer may lead the assessment team along with County staff. An assessment report will be prepared with recommendations for ECM actions for the County's consideration. Life cycle cost analysis will be utilized for ECM assessment to facilitate Ada County in optimizing their return on investment. A 20% IRR (internal rate of return) is the goal for each project.

Assessment reports include:

- ❖ Recommended ECM's
- ❖ An estimated cost for ECM implementation and calculation of ECM simple payback
- ❖ Life Cycle Costing optimization where appropriate
- ❖ Identification of existing operating efficiencies
- ❖ Identification of funding options for measure implementation
- ❖ Identification of Operations & Maintenance's (O & M's)
- ❖ Recommendation to reduce water consumption and sewer bills
- ❖ Recommendation to reduce trash volumes and costs

Building Retrofits

Building retrofits can generate savings that enable the County 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.

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

- ❖ Building safety
- ❖ Comfort and productivity of occupants
- ❖ Increased employee productivity
- ❖ Reductions in system failures
- ❖ Expansion of anticipated life-cycle or intended use
- ❖ Reduced maintenance and utility costs

MAJOR ACCOMPLISHMENTS IN 2016

		1-year Revenue	Recurring
1. Building Upgrades and New Construction			
Paramedics Station 17	Silver LEED certification		
Juvenile Probation Svcs West	Designed and built to LEED standards, earned IPCo Incentive	\$ 3,305	
911 Dispatch Center	Designed and built to LEED standards, earned IPCo Incentive	\$ 64,745	
2. Utilities / Operating Expenses			
LED Lighting Upgrades			
Juvenile Court Services, Boise	Replaced lights: gymnasium, exterior wall packs, parking lot pole lights Lamps last 5-10x longer, wall packs up from 10,000 hrs to 50,000 hrs New parking lot lights rated at 100,000 hours, 11 yrs continuous use	\$ 5,321	\$ 2,709
Ada County Courthouse	Replaced ext wall packs (250w metal halides)	\$ 1,200	\$ 569
Benjamin Building	Replaced ext wall packs (250w MH) and pole lights (400-1000w MH)	\$ 3,574	\$ 1,675
Morris Hill	Replaced ext wall packs (400w MH)	\$ 721	\$ 337
Ada County Courthouse	Earned 2016 ENERGY STAR		
3. Renewable Energy			
Landfill Gas to Energy	3.2 MW capacity, Generated 22,049,502 kWh (calendar year 2016)	\$ 247,845	\$ 250,000
Barber Dam	4.1 MW capacity, Leased to Enel Green Power	\$ 27,422	\$ 27,422
Barber Park PV System	11 KW capacity, Generated 14,449 kWh (calendar year 2016)	\$ 1,000	\$ 1,000
4. Solid Waste / Recycling			
Cardboard	Recycled from County buildings, not landfilled 41 tons or 820 cu yd	\$ 1,226	\$ 8,200
Shredded Paper	Shredding service recycles paper, not landfilled 128 tons or 655 cu yd (recurring @ \$10/cu yd avoided cost of renting recycling containers)		\$ 6,550
Grand Total		\$ 356,359	\$ 298,462

GOALS FOR 2017

1. Building Upgrades and Projects

400 Benjamin Building
Paramedics Station #23
Weed & Pest Addition
Juvenile Court Services
Jail
Morris Hill Roof

Earn 2017 ENERGY STAR
Complete remodel of the existing station on Glenwood
Add 2,700 square feet of new workspace, earn IPCo Incentives
Replace roof sections w/white TPO membrane
Replace roof sections w/white TPO membrane, earn IPCo Incentives
Replace entire roof w/ white TPO membrane, earn IPCo Incentives

2. Utilities / Operating Expenses

All major County facilities
All major County facilities
Ada County Courthouse
Juvenile Court Services, Boise
Public Safety Bldg Complex

Track utilities and update Energy Use Index
Create tool to measure, compare, and manage water usage
Manage geothermal usage and regulate use in the summer months
Install occupancy sensors in break areas and small rooms
Install notched V-belts on motors

3. Renewable Energy

Landfill Gas to Energy
Barber Dam
Barber Park PV System

Develop plans for 2 additional landfill gas engines
Work with co-licensee, dam operator (Fulcrum) to renew FERC license
Continue to offset park building energy bills with "free" solar power

4. Solid Waste / Recycling

Cardboard
Shredded Paper

Replace cardboard bailer at the Jail
Put shredding service contract out to bid

5. Outreach and Education

County Website
Sustainability Education

Post project profiles on current projects
Develop a program to educate and engage County employees

GENERAL GOALS AND OBJECTIVES FOR 2017-2018

The objectives of the SORC as summarized on page 2 are categorized and explained in more detail in the remainder of the report as follows:

ADMINISTRATIVE GOALS	PAGE 11
BUILDINGS, ENERGY USE, AND RENEWABLES GOALS	PAGE 12
TRANSPORTATION AND FUEL GOALS	PAGE 23
PROCUREMENT, RECYCLING, & WASTE GOALS	PAGE 25
OUTREACH & EDUCATION GOALS	PAGE 26

Refer to the supporting in pages in each category for more information.

ADMINISTRATIVE GOALS

Adapt the existing framework of County Operations' policies and procedures into a solid foundation for progression into sustainability and resource efficiency. Promote sustainability through partnerships, education and program development. To devise an evaluation system complete with outcome indicators and measurable metrics. Accomplish the mission of the SORC in an accountable manner through effective use of staff time and energy, proper governance and appropriate resource allocation.

OBJECTIVES

- Align the overall mission of Ada County of serving the public good with expanding and growing the model of sustainability
- Establish benchmarks to foster the development of precise, tangible goals that can be quantitatively monitored and measured with set indicators and outcomes
- Promote and facilitate the Ada County SORC Plan Partnership



TASKS TO SUPPORT OBJECTIVES

- Coordinate with elected officials and department heads to establish commitment and a framework for concrete goals
- Develop and implement a framework for progress and evaluation
 - Provide data tracking and continuous commissioning associated with operation and occupancy of all County facilities
 - Develop a responsibility breakdown
 - Explore the feasibility of pursuing STAR certification
 - Frequently reassess to ensure advancements towards targets are realistic and achievable
- Align SORC cohesively with 2025 Ada County Comp Plan
- Provide administration and oversight to quantify benefits and savings of energy conservation projects at County facilities
- Identify and create proactive solutions for obstacles that may inhibit staff and departments from achieving goals
- Adopt a formal charter with defined expectations for membership in SORC Plan Partnership
- Utilize SORC Plan Partnership as a working group to promote sustainability within County
- Explore the utilization of varied certifications, benchmarking tools, and checklists
- Track Ada County's ecological footprint
 - Inventory and monitor greenhouse gas emissions from building energy use, transportation fuel use, and waste generation for emissions inventory
 - Quantify offsets from alternative transportation, green buildings, renewable energy, and recycling programs
 - Stay abreast of developments in greenhouse gas and emissions reporting requirements
 - Report periodically on progress to stay on track and provide accountability
 - Conduct a retroactive annual emissions inventory to track trends in consumption

BUILDINGS, ENERGY USE, AND RENEWABLES GOALS

Support high performance County buildings and efficient landscapes through green construction, operation, and maintenance practices to realize economic and resource savings, demonstrate responsible use of taxpayer dollars, and improve markets for environmentally friendly products and practices. Promote and expand the County's use of unique regional renewable energy.

OBJECTIVES

- Limit, control, and lower utility costs
- Make County facilities as energy and resource efficient as reasonably possible
- Build, operate, and maintain high performance buildings to ensure that conservation and responsible resource use remains a priority for Ada County
- Support high performance green buildings
- Create healthy work spaces for optimal occupant health and comfort
- Promote and expand renewable energy

TASKS TO SUPPORT OBJECTIVES

- Track consumption and costs of electricity, natural gas, water, sewer, and trash
- Assess ways to reduce peak load in the summer
- Perform night walks to observe buildings after-hours
- Maintain annual Energy Use Index for buildings 10,000+ sf
- Update, install, or retrofit lighting and HVAC systems with energy efficient options wherever feasible
- Evaluate data to document savings from retrofits
- Benchmark buildings with ENERGY STAR's Portfolio Manager
- Apply for ENERGY STAR label for eligible buildings
- Conduct energy audits and facility assessments to identify necessary building operation and efficiency improvements
- Invest in facilities, equipment, and other goods that reflect the highest feasible efficiency and lowest life cycle costs
- Incorporate WaterSense programs into Ada County facilities
- Provide Building Operator Certification for maintenance staff
- Develop regular maintenance and comprehensive preventive maintenance programs and schedules for all County facilities
- Incorporate building commissioning into construction projects
- Recommission buildings as necessary
- Support the Idaho Energy and Green Building Conference
- Be an advocate for the US Green Building Council.
- Provide information and case studies for County LEED projects
- Have a LEED Accredited Professional on staff
- Increase the overall comfort and productivity of staff
- Manage indoor air quality in all occupied spaces
- Evaluate energy conservation measures (ECMs) for all facilities
- Participate in local utility incentive programs
- Explore a Revolving Energy Fund to use energy savings for additional projects
- Use sustainable landscaping practices to reduce water use
- Seek grants and other funding for solar projects on County facilities
- Participate in EPA's Landfill Methane Outreach Program
- Measure and verify landfill gas (LFG) quality and quantity
- Ensure landfill gas to energy (LFGTE) generator complies with contractual obligations to provide revenue documentation
- Assist with expansion of the landfill gas to energy project

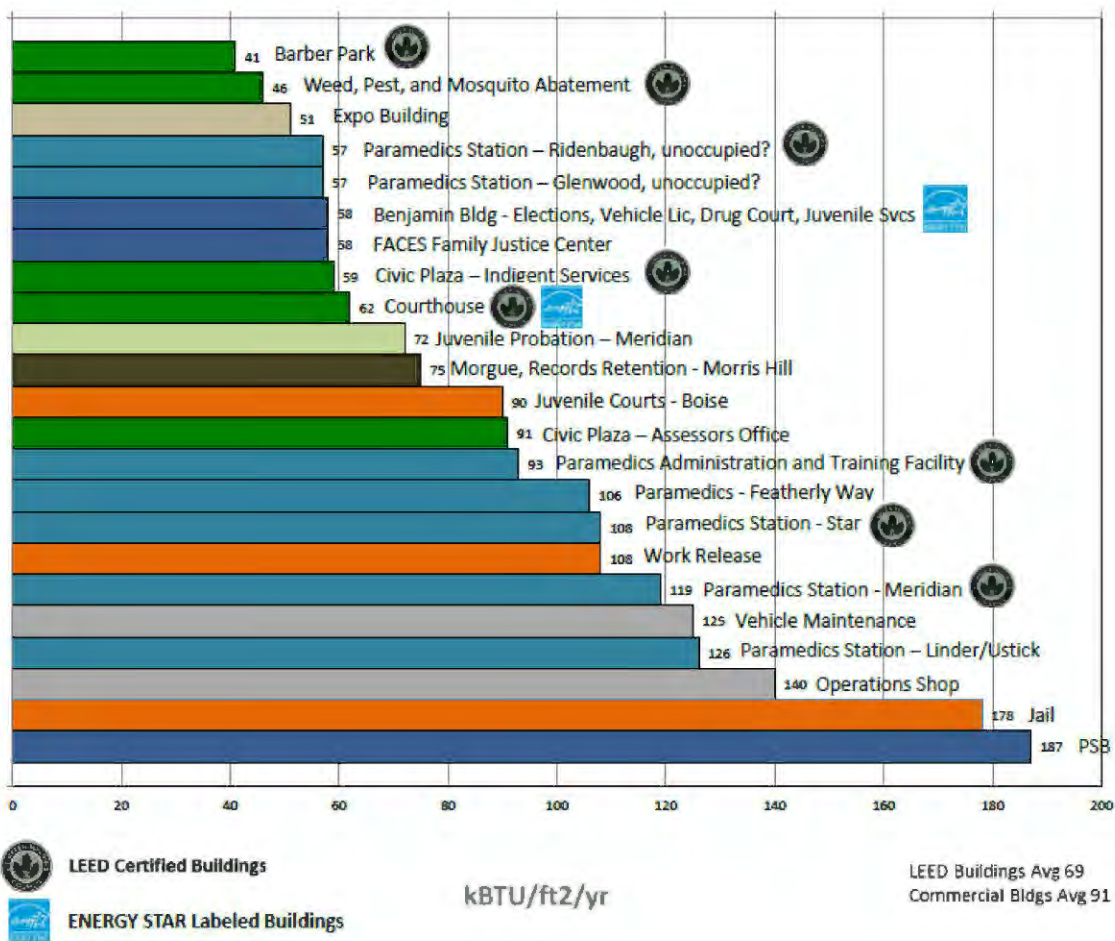
ENERGY USE INDEX (EUI)

What is an EUI?

An Energy Use Index is a basic measure of a facility’s energy performance on a per square foot basis. It is typically measured as kBТУs of energy used annually per square foot. A BTU, British Thermal Unit, is a basic measure of heat value (energy content) of fuels. All energy consumed by a particular building; i.e., electricity, natural gas, etc., is converted to thousand BTU’s, added together, and divided by the total square footage.

Below is a current EUI chart for most of Ada County’s buildings. Generally, a low EUI signifies good energy performance.

Energy Use Index – 2016



Certain building types will always use more energy than others. For example, a park building with seasonal use requires relatively little energy compared to a paramedic station that operates 24/7. Similarly, a small office building with 50-100 employees will use less energy than a jail facility that supports nearly 1,000 people on a continual basis.

UTILITY INCENTIVES

Efficiency programs not only save the County money, but also defer the need to build new power plants and prevent the utility from acquiring power from more expensive sources to meet growing customer demand. Ada County takes advantage of Idaho Power's incentive programs in any new or remodel building project.



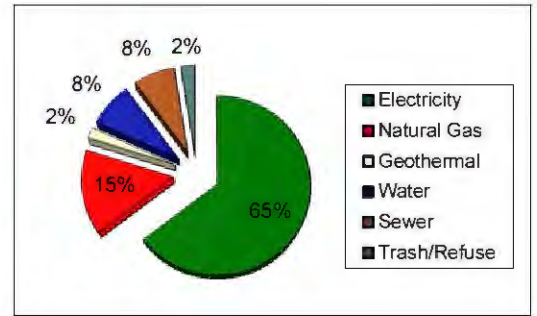
Location	Incentive	Measures	
	FY 06-07	\$4,597	Lighting, AC, Roofing, Commissioning, Controls
	FY 07-08	\$70,100	Lighting, AC, Roofing, Windows, Controls
	FY 08-09	\$18,982	Lighting, AC, Roofing, Variable Speed Drives
	FY 09-10	\$12,613	Lighting, AC, Roofing, Windows
	FY 10-11	\$13,129	Lighting, AC, Roofing, Windows, Controls
Expo Idaho - Expo Building	\$10,000	HVAC Controls	
Expo Idaho - Small Animal Barn	\$4,284	HVAC Controls	
Expo Idaho - Western Town	\$2,700	HVAC Controls	
Jail Pod D	\$4,573	Exit Signs, HVAC, Roofing, Var Speed Drives	
	FY 12-13	\$21,557	
Public Safety Building Complex	\$24,007	LED Lighting Upgrade	
	FY 13-14	\$24,007	
Paramedics Admin, 370 Benjamin	\$188	LED Lighting Upgrade	
Juvenile Detention, Boise	\$5,321	LED Lighting Upgrade	
Expo Idaho Admin and Entrance	\$3,039	Lighting, HVAC, Roofing, Appliances	
Paramedics Station 17, Ridenbaugh	\$2,922	Lighting, HVAC, Roofing, Appliances	
	FY 14-15	\$11,470	
Courthouse Parapet Walls	0	LED Lighting Upgrade--lights not on the list	
Morris Hill Warehouse	\$520	Exit Signs	
Morris Hill Warehouse	\$721	Exterior Lighting Upgrade (4) 400w MH wall packs	
Juvenile Meridian	\$3,305	Lighting, AC, Roofing, Controls, Appliances	
400 Benjamin	\$3,574	Lighting (7) Exterior Wall Packs & (8) Pole Lights	
	FY 15-16	\$8,120	
Courthouse Exterior Lights	\$1,200	LED Lighting Upgrade, (20) 100w MH exterior lights	
Expo Idaho Maintenance Shop	\$561	Lighting Upgrade, 8' T12s to 4' T8s	
Juvenile Meridian	\$359	LED Lighting Upgrade, (3) 250w MH parking lot lights	
911 Dispatch	\$23,186	Lighting, AC, Roofing, Controls	
911 Dispatch	\$39,409	Non Lighting, HVAC only	
	FY 16-17	\$64,715	
TOTAL 2006-2017	\$249,290		

UTILITY SUMMARY

The Ada County Operations Department now manages, maintains, and pays utilities for nearly 1.3 million sf of building space and more than 250,000 sf of parking facilities. Nearly 25,000 sf of new building space was added in 2016 with the addition of the 911 Dispatch Center in Meridian.

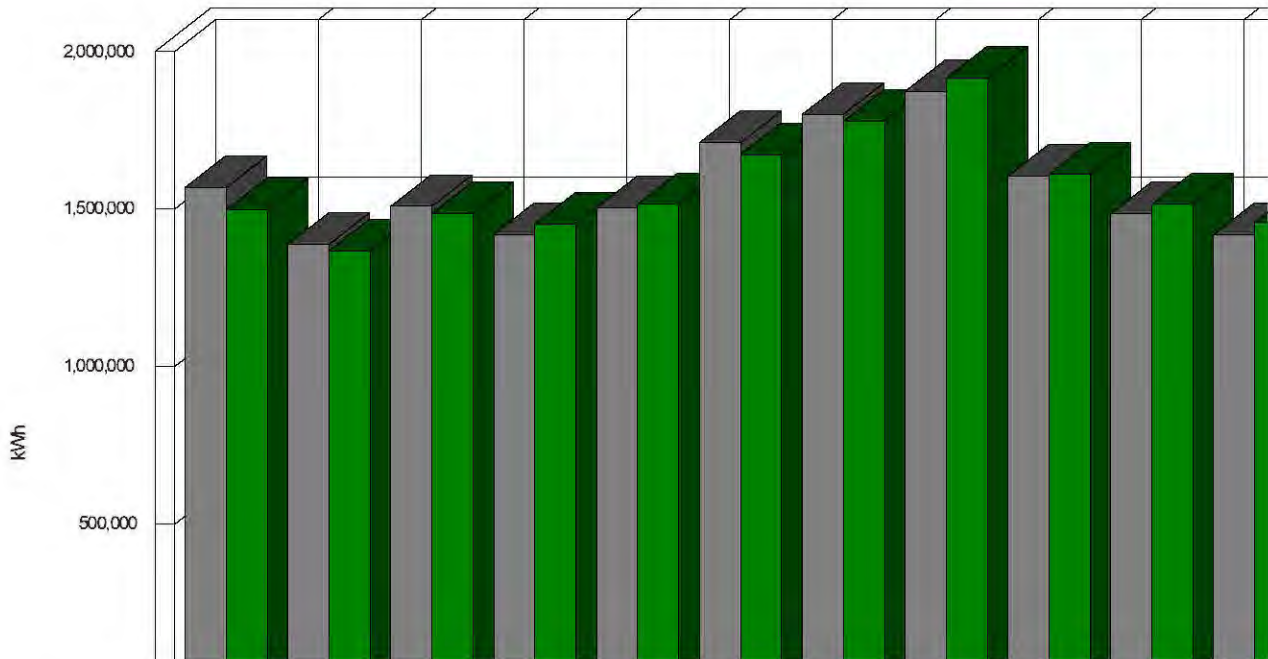
The total cost to the County for all utilities combined increased 10%, or \$31,912, from FY14-15 to FY15-16. The largest increases were seen in the water and sewer bills. See the charts below for more information.

FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	
\$987,201	\$1,172,745	\$1,283,798	\$1,308,951	\$1,306,080	Electricity
\$319,952	\$283,637	\$307,288	\$272,630	\$268,889	Natural Gas
\$43,409	\$65,459	\$38,833	\$39,522	\$29,232	Geothermal
\$157,853	\$162,341	\$161,721	\$159,655	\$184,442	Water
\$142,995	\$156,361	\$149,761	\$172,733	\$192,143	Sewer
\$51,051	\$49,877	\$49,342	\$49,179	\$53,959	Trash/Refuse
\$1,702,461	\$1,890,420	\$1,990,743	\$2,002,670	\$2,034,745	
2.4%	11.0%	5.3%	5.9%	2.2%	Increase/Decrease
1.3%	1.1%	0.0%	0.5%	0.4%	SQ FT ADDED



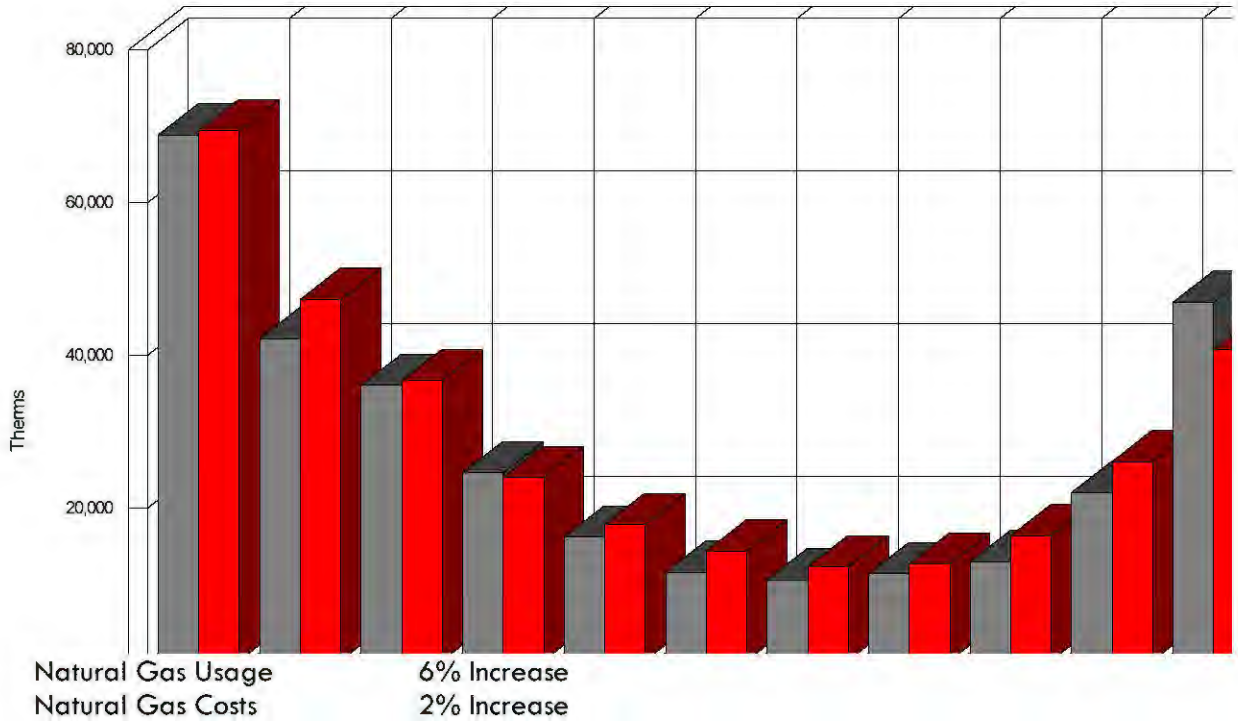
The following graphs compare usage and costs for the major utilities; i.e., electricity, natural gas, water, sewer, trash, for all County buildings combined for calendar years 2015 and 2016.

Monthly Electricity Use for Ada County

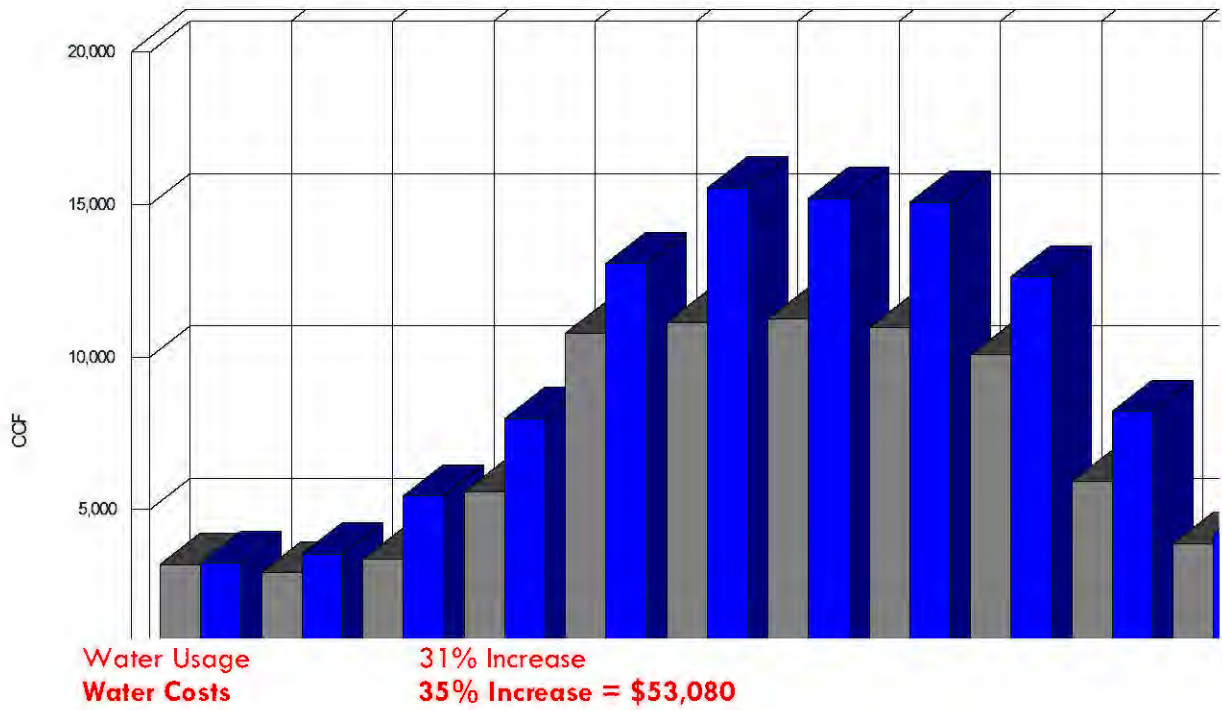


Electricity Usage 1% Increase
 Electricity Costs 2% Increase

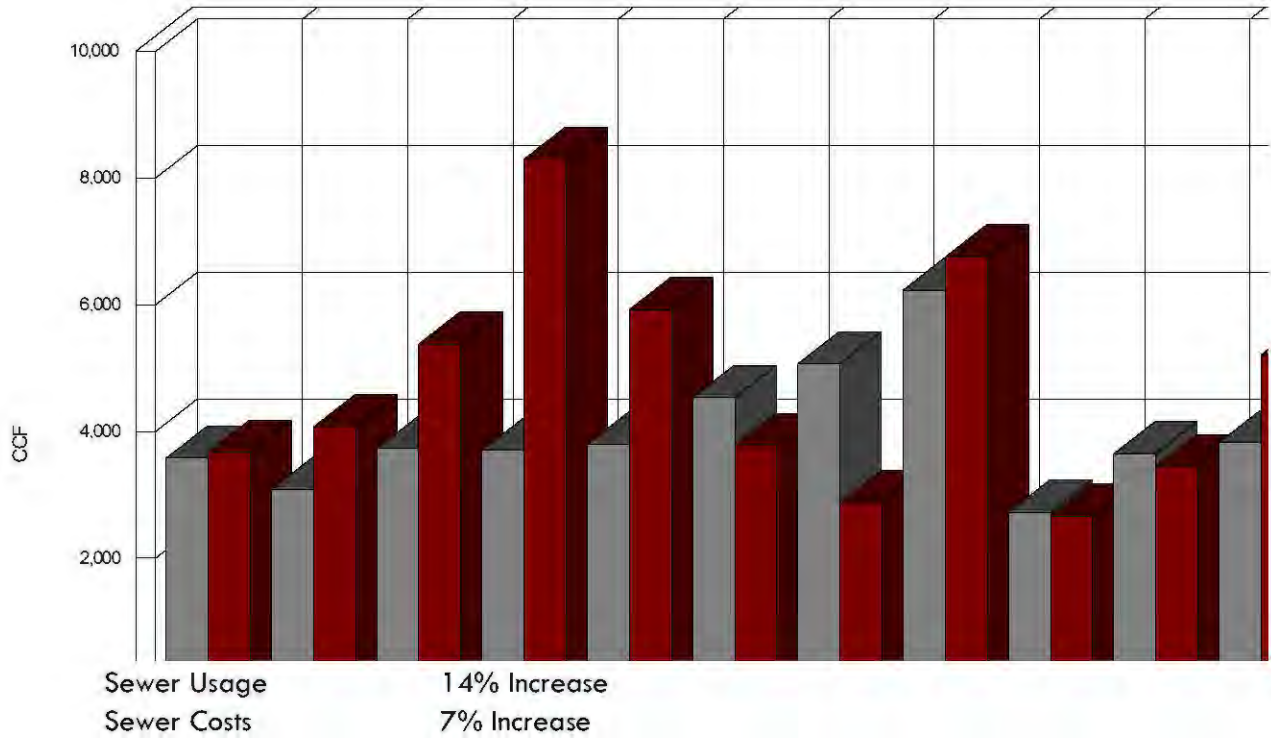
Monthly Natural Gas Use for Ada County



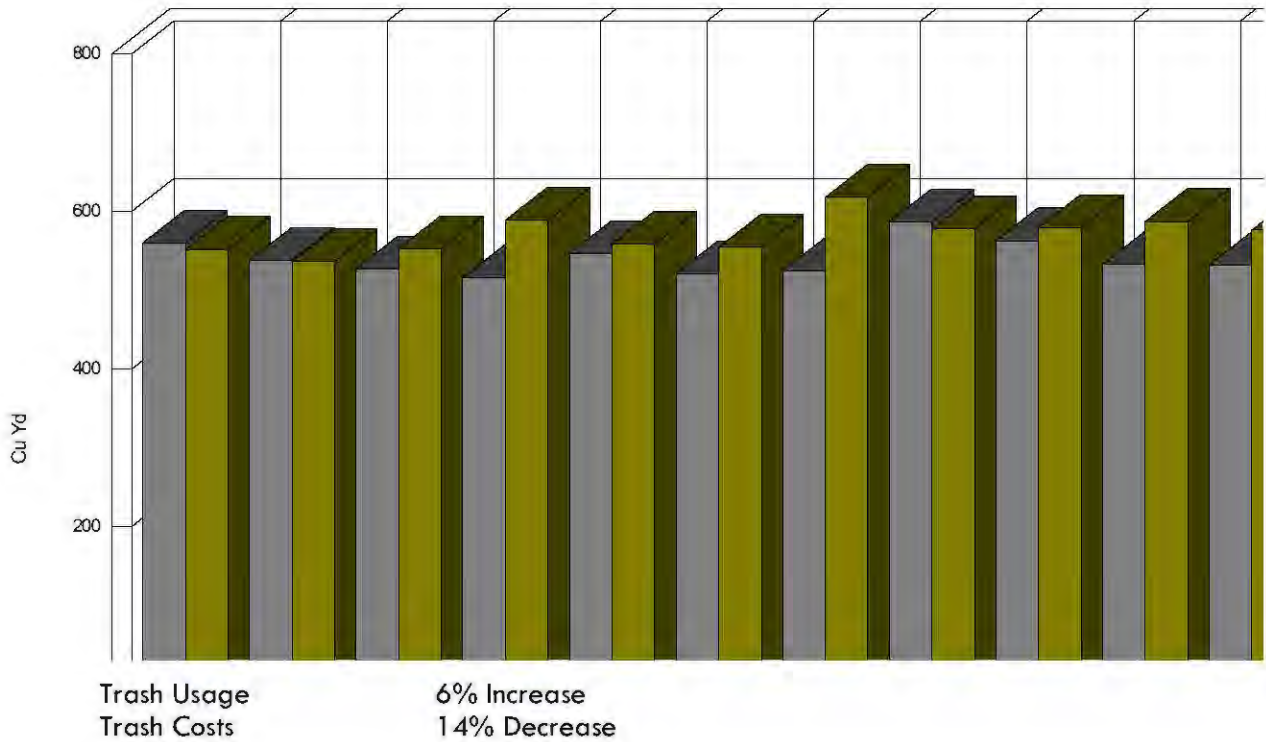
Monthly Water Use for Ada County



Monthly Sewer Use for Ada County



Monthly Refuse Use for Ada County



Utility Summary - Annual Usage and Costs by Utility Type											
	CONSUMPTION					COSTS					1 yr diff
	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	
Electricity (kWh)											
Oct	1,442,628	1,452,604	1,418,860	1,545,626	1,485,229	\$69,912	\$80,219	\$93,846	\$103,049	\$99,201	
Nov	1,413,985	1,391,984	1,422,346	1,468,571	1,418,794	\$67,831	\$76,352	\$93,185	\$96,960	\$93,504	
Dec	1,474,810	1,488,646	1,566,102	1,546,557	1,523,218	\$69,412	\$79,706	\$99,556	\$100,872	\$99,202	
Jan	1,505,066	1,641,003	1,586,719	1,568,020	1,496,955	\$71,758	\$87,031	\$100,509	\$101,465	\$96,828	
Feb	1,399,508	1,438,569	1,387,695	1,387,229	1,367,582	\$67,855	\$78,175	\$90,986	\$92,245	\$91,129	
Mar	1,434,124	1,505,636	1,465,518	1,508,462	1,484,849	\$70,725	\$81,953	\$94,928	\$99,253	\$98,715	
Apr	1,370,866	1,444,737	1,398,257	1,419,136	1,451,987	\$68,877	\$80,107	\$92,580	\$94,609	\$97,640	
May	1,476,936	1,541,813	1,502,000	1,504,040	1,515,101	\$74,113	\$86,995	\$99,052	\$100,726	\$102,624	
Jun	1,490,676	1,681,575	1,571,098	1,708,903	1,673,078	\$94,837	\$126,220	\$121,014	\$132,950	\$129,481	
Jul	1,831,313	1,915,207	1,916,922	1,800,489	1,777,700	\$118,799	\$143,581	\$146,229	\$137,583	\$137,635	
Aug	1,954,052	1,956,815	1,883,778	1,873,455	1,915,196	\$126,377	\$145,659	\$142,739	\$141,721	\$148,142	
Sep	1,556,816	1,597,714	1,605,726	1,604,180	1,610,237	\$86,705	\$106,747	\$109,174	\$107,518	\$111,979	
	18,350,780	19,056,303	18,725,021	18,934,668	18,719,926	\$987,201	\$1,172,745	\$1,283,798	\$1,308,951	\$1,306,080	\$ (2,871)
	3%	4%	-2%	1%	-1%	6%	19%	9%	2%	-0.2%	
Natural Gas (therms)											
Oct	29,708	29,147	30,808	25,800	22,004	\$23,107	\$20,873	\$23,348	\$19,708	\$16,049	
Nov	55,147	45,610	53,272	49,918	46,914	\$41,234	\$25,130	\$39,050	\$36,834	\$32,247	
Dec	77,609	69,297	77,748	61,021	70,071	\$55,576	\$35,507	\$55,126	\$43,455	\$46,782	
Jan	75,425	96,160	74,897	68,830	69,375	\$53,645	\$63,091	\$53,106	\$48,888	\$46,355	
Feb	59,862	60,565	52,127	42,133	47,286	\$41,235	\$39,935	\$37,129	\$30,193	\$31,746	
Mar	46,496	43,117	38,627	36,019	36,645	\$32,633	\$29,292	\$28,263	\$26,372	\$25,449	
Apr	28,139	26,403	26,929	24,585	23,966	\$20,707	\$18,855	\$20,626	\$18,829	\$17,311	
May	19,304	19,093	17,798	16,166	17,825	\$14,242	\$13,643	\$13,647	\$12,412	\$12,898	
Jun	13,538	13,226	12,368	11,571	14,328	\$10,014	\$9,475	\$9,490	\$8,898	\$10,381	
Jul	11,188	11,569	10,935	10,576	12,280	\$8,292	\$8,295	\$8,408	\$8,424	\$8,910	
Aug	11,474	11,432	11,194	11,350	12,607	\$8,501	\$8,200	\$8,111	\$8,807	\$9,136	
Sep	14,664	15,615	13,671	12,926	16,347	\$10,766	\$11,341	\$10,484	\$9,810	\$11,622	
	442,554	441,234	420,374	370,895	389,648	\$319,952	\$283,637	\$307,298	\$272,630	\$268,889	\$ (3,741)
	-2%	-0.3%	-5%	-12%	5%	-11%	-11%	8%	-11%	-1%	
Geothermal (Kgal)											
Oct	782	932	326	579	456	\$3,003	\$3,576	\$1,140	\$2,021	\$1,593	
Nov	1,461	1,260	1,144	1,770	960	\$5,601	\$4,831	\$3,991	\$6,174	\$3,350	
Dec	2,248	2,094	3,120	1,811	2,030	\$8,612	\$7,807	\$10,877	\$6,315	\$7,076	
Jan	1,680	4,670	2,278	2,419	2,008	\$6,439	\$16,277	\$7,943	\$8,435	\$7,000	
Feb	1,497	2,573	1,346	1,417	1,264	\$5,738	\$8,971	\$4,696	\$4,409	\$4,409	
Mar	1,097	2,160	930	1,146	726	\$4,206	\$7,534	\$3,245	\$3,998	\$2,534	
Apr	538	1,549	848	823	476	\$2,065	\$5,407	\$2,956	\$2,870	\$1,662	
May	593	1,712	633	488	210	\$2,276	\$5,970	\$2,207	\$1,703	\$736	
Jun	272	1,084	285	183	38	\$1,046	\$3,780	\$995	\$641	\$134	
Jul	347	169	7	156	7	\$1,334	\$593	\$30	\$548	\$30	
Aug	370	14	21	178	29	\$1,420	\$48	\$75	\$622	\$105	
Sep	435	190	194	359	172	\$1,669	\$665	\$678	\$1,255	\$603	
	11,320	18,407	11,132	11,329	8,376	\$43,409	\$65,459	\$38,833	\$39,522	\$29,232	\$ (10,290)
	6%	63%	-40%	2%	-26%	6%	51%	-41%	2%	-26%	
Water (CCF)											
Oct	8,988	6,767	6,151	8,998	5,915	\$13,613	\$11,482	\$10,890	\$11,308	\$11,031	
Nov	3,903	4,088	4,135	4,492	3,890	\$7,653	\$8,196	\$8,434	\$8,160	\$8,186	
Dec	3,699	3,510	3,322	3,229	3,298	\$7,259	\$7,701	\$7,425	\$7,671	\$7,693	
Jan	3,730	3,509	3,356	3,201	3,264	\$7,458	\$7,549	\$7,489	\$7,522	\$7,669	
Feb	3,564	3,230	3,206	2,932	3,541	\$7,653	\$7,045	\$7,105	\$7,017	\$8,243	
Mar	3,924	4,326	3,685	3,375	4,530	\$8,308	\$8,820	\$8,317	\$8,784	\$9,649	
Apr	4,585	7,926	5,720	5,686	7,011	\$9,590	\$13,633	\$11,025	\$13,357	\$11,123	
May	9,343	12,110	10,432	10,914	11,484	\$15,039	\$18,888	\$16,828	\$18,470	\$17,452	
Jun	12,029	13,020	14,542	11,403	14,011	\$19,047	\$20,829	\$23,686	\$20,363	\$25,319	
Jul	12,787	13,411	12,645	11,565	14,953	\$20,717	\$21,560	\$22,115	\$21,072	\$28,537	
Aug	13,277	12,267	12,413	11,187	15,081	\$21,407	\$20,116	\$20,484	\$19,622	\$27,027	
Sep	12,523	9,563	11,915	12,049	12,640	\$20,109	\$16,522	\$17,923	\$16,309	\$22,513	
	92,352	93,727	91,522	89,031	99,618	\$157,853	\$162,341	\$161,721	\$159,655	\$184,442	\$ 24,787
	8%	1%	-2%	-3%	12%	12%	3%	-0.4%	-1%	16%	
Sewer (CCF)											
Oct	1,159	1,041	2,280	2,997	3,647	\$11,746	\$11,284	\$12,644	\$12,475	\$15,239	
Nov	950	1,561	1,889	2,296	3,826	\$10,734	\$11,805	\$12,033	\$11,745	\$14,456	
Dec	599	1,335	2,386	4,345	5,123	\$10,998	\$12,141	\$12,711	\$14,724	\$16,737	
Jan	980	1,533	1,630	3,579	3,672	\$11,446	\$12,425	\$11,856	\$14,145	\$14,970	
Feb	851	1,872	1,548	3,083	4,072	\$10,596	\$12,211	\$11,098	\$13,019	\$14,799	
Mar	2,198	1,197	2,067	3,729	5,381	\$12,829	\$12,872	\$13,001	\$14,990	\$17,383	
Apr	2,618	2,944	987	3,702	8,299	\$12,745	\$14,430	\$11,360	\$14,935	\$20,819	
May	3,975	4,396	2,673	3,797	5,924	\$13,829	\$14,392	\$11,920	\$14,437	\$16,947	
Jun	1,186	3,978	3,240	4,535	3,777	\$11,146	\$13,996	\$12,529	\$15,531	\$14,679	
Jul	1,027	4,165	3,359	5,068	2,875	\$11,317	\$14,281	\$12,804	\$16,122	\$14,151	
Aug	4,492	5,941	7,132	6,231	6,754	\$14,597	\$15,796	\$16,402	\$16,864	\$18,276	
Sep	1,051	732	2,160	2,725	2,664	\$11,012	\$10,728	\$11,403	\$13,746	\$13,687	
	21,086	30,695	31,351	46,087	56,014	\$142,995	\$156,361	\$149,761	\$172,733	\$192,143	\$ 19,410
	-1%	46%	2%	47%	22%	1%	9%	-4%	15%	11%	
Trash/Refuse (Cu Yd)											
Oct	594	555	587	564	532	\$4,786	\$3,689	\$4,570	\$4,359	\$4,062	
Nov	549	601	576	515	532	\$3,905	\$4,592	\$4,165	\$3,658	\$4,039	
Dec	578	577	560	510	561	\$4,444	\$4,140	\$3,863	\$3,718	\$4,442	
Jan	578	590	607	560	552	\$4,446	\$4,467	\$4,789	\$4,647	\$4,550	
Feb	566	581	554	537	536	\$4,291	\$4,309	\$3,597	\$4,005	\$4,016	
Mar	577	576	583	527	552	\$4,420	\$4,130	\$4,282	\$4,038	\$4,279	
Apr	564	573	587	515	588	\$4,257	\$4,028	\$4,323	\$3,882	\$4,819	
May	548	602	558	546	558	\$3,959	\$4,644	\$3,855	\$4,501	\$4,314	
Jun	564	571	553	521	554	\$4,226	\$4,014	\$4,086	\$4,036	\$4,296	
Jul	555	555	540	524	618	\$4,021	\$3,741	\$3,751	\$4,022	\$5,449	
Aug	547	572	556	586	577	\$3,908	\$4,092	\$4,152	\$3,993	\$4,706	
Sep	577	579	534	562	579	\$4,388	\$4,031	\$3,909	\$4,520	\$4,787	
	6,797	6,932	6,795	6,467	6,739	\$51,051	\$49,877	\$49,342	\$49,179	\$53,959	\$ 4,617
	5%	2%	-2%	-5%	4%	7%	-2%	-1%	-0.3%	10%	
TOTAL											
Increase / Decrease						\$1,702,461	\$1,890,420	\$1,990,743	\$2,002,670	\$2,034,745	\$ 31,912
						2.4%	11.0%	5.3%	0.6%	1.6%	
						1.3%	1.1%	0.0%	0.5%	0.4%	

SQ FT ADDED

PHOTOVOLTAIC (PV) POWER – BARBER PARK

Ada County has an 11.5 KW solar photovoltaic (PV) system on the rooftop of the Barber Park Administration Building that is net-metered by Idaho Power. Each year hundreds of people launch their rafts and inflatables to float the scenic Boise River. Ada County maintains a launch site at Barber Park complete with free air pumps. The solar energy generated by the PV system offsets these costs with “free” energy from the sun.



The system was designed and installed in September 2011 using federal grant money from the American Recovery and Reinvestment Act. It generated 14,410 kWh in calendar year 2015 and 14,449 kWh in 2016, with an estimated annual value of approximately \$1,200.

Solar PV System Specs:

- 60 Solyndra Panels, @ 191 watts
- 1 Midnight Solar Combiner Box
- 2 5000-US SMA Inverters
- 1 SMA Sunny WebBox Monitoring System



HYDROELECTRIC POWER – BARBER DAM

The Barber Dam is a timber-crib dam on the Boise River located about 3 mi (5 km) east of Boise, Idaho. The dam was constructed between 1904 and 1906 to serve as a mill pond for timber. A power plant was also constructed in conjunction with the dam to power the mill and the town of Barberton (Barber) circa 1910. The mill closed down during the Great Depression in 1934.

Ada County acquired the dam in 1977. In 1988, Ada County found an experienced, qualified hydro operating partner and entered into a 35-year lease with Fulcrum to operate the dam. Ada County earns approximately \$28,000 per year for the lease of the dam.

Ada County and Fulcrum are co-licensees of the FERC license that expires in 2023. Fulcrum LLC is a subsidiary of Enel Green Power North America. Fulcrum employees operate the dam and the electricity is sold directly to Idaho Power.

The power house currently contains two Kaplan turbine generators with a combined capacity of 4.14 MW. Power fluctuates with the seasons, but they typically generate about 12,000,000 kWh per year (12,000 MWh) enough energy to power 1,000 homes. (Typical home uses about 1,000 kWh per month.)



LANDFILL GAS TO ENERGY PROJECT (LFGTE)

Overview

Harnessing the power of landfill gas (LFG) energy provides environmental and economic benefits to landfills, energy users, and Ada County. LFG energy projects:

- Reduce greenhouse gases emissions
- Offset the use of non-renewable resources, such as coal, oil, and natural gas
- Improve local air quality
- Provide revenue for Ada County



What is LFG?

LFG is a natural byproduct of the decomposition of organic material in municipal solid waste (MSW) in anaerobic conditions. LFG contains roughly 50 percent methane and 50 percent carbon dioxide and trace amounts of inorganic and other compounds. When waste is first deposited in a landfill, it undergoes an aerobic (i.e., with oxygen)

decomposition stage during which little methane is generated. Then, typically within less than one year, anaerobic (i.e., without oxygen) conditions are established and methane-producing bacteria decompose the waste and produce methane and carbon dioxide. Methane is a potent greenhouse (i.e., heat trapping) gas – over 20 times more potent than carbon dioxide, the primary cause of global warming. Landfills are the second largest human-caused source of methane in the United States. This is why LFG must either be burned via flare or controlled combustion at the Hidden Hollow site as heat input to produce electricity.

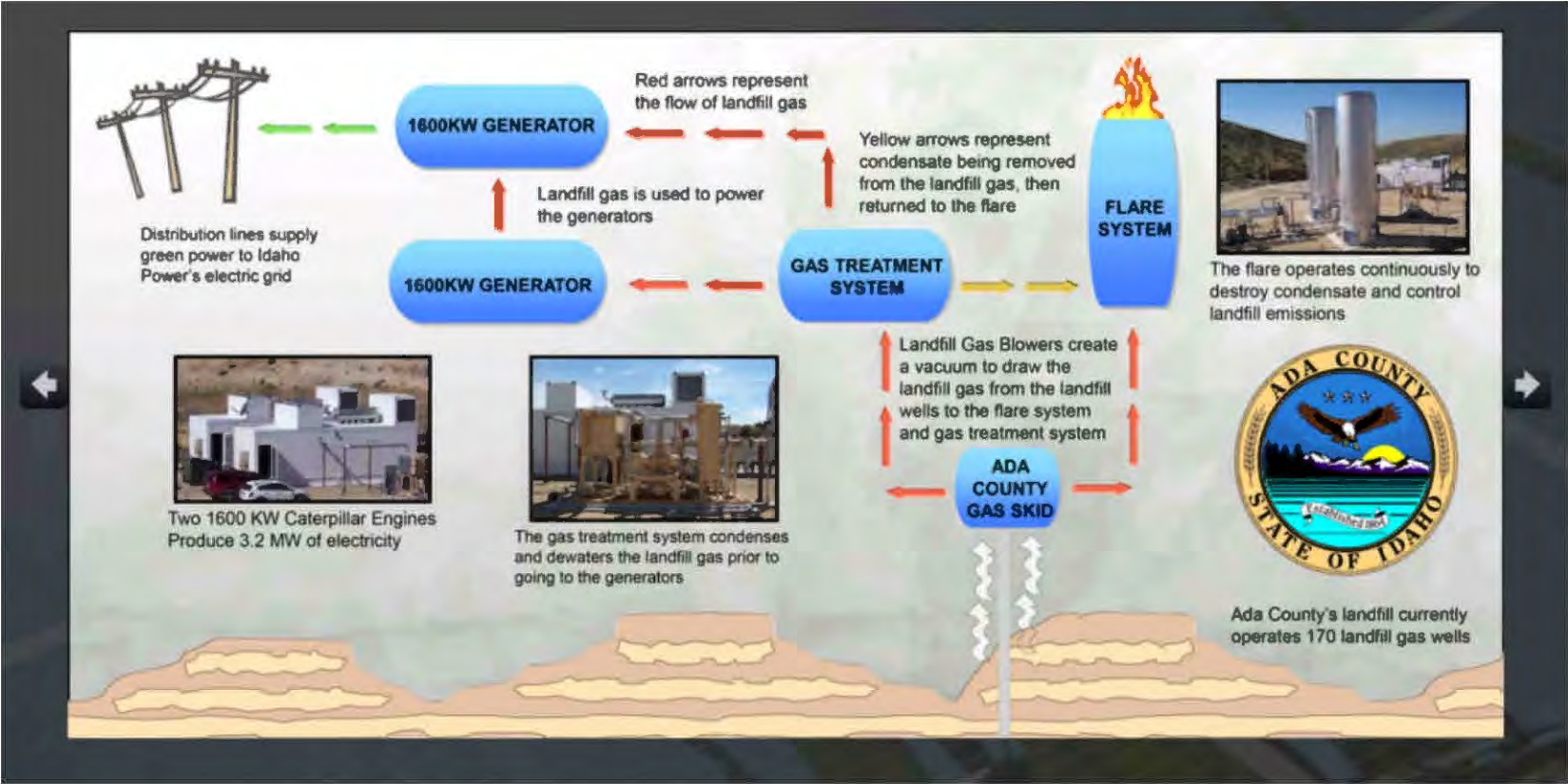
Benefits to Ada County

The 3.2 MW LFGTE system at the Hidden Hollow Landfill consists of two 1600 KW Caterpillar reciprocating engines generating almost 2,000,000 kWhs per month which is sold directly to Idaho Power. Hidden Hollow is planning to add two more engines to combust more LFG, increasing the output to 6.4 MW and doubling the revenue to Ada County.

Annual Energy Production and Revenue

	kWh	Gas	Green Tags	Total
2007	18,364,800	\$157,871.82	\$34,888.56	\$266,147.58
2008	21,435,206	\$192,380.91	\$49,388.60	\$294,731.74
2009	21,370,914	\$194,734.04	\$49,119.17	\$243,853.21
2010	23,093,621	\$215,267.77	\$60,021.95	\$275,289.72
2011	23,683,902	\$225,865.82	\$60,787.84	\$286,653.67
2012	21,722,451	\$211,937.67	\$56,470.07	\$268,407.74
2013	20,278,871	\$202,410.26	\$52,708.08	\$255,118.34
2014	18,242,849	\$186,309.66	\$47,414.48	\$230,990.59
2015	21,167,580	\$221,138.37	\$5,671.37	\$226,809.74
2016	22,049,502	\$235,686.30	\$12,158.61	\$247,844.91
GRAND TOTAL				\$2,652,674.42





TRANSPORTATION AND FUEL GOALS

Lessen the County's overall contribution of GHG emissions and impact on traffic congestion by supporting programs and infrastructure that facilitate active transportation, multimodal options, fuel efficiency, trip reduction, the use of public transportation, and carpooling for County employees.

OBJECTIVES

- Decrease emissions and fuel consumption from county-owned vehicles, reduce waste and environmental impact
- Promote development of infrastructure for use of alternative fuels
- Promote alternative transportation use among county employees
- Support the Parks and Waterways Department in maintaining bike paths and trails within the county

TASKS TO SUPPORT OBJECTIVES

- Develop and implement standards for best practices in sustainable fleet maintenance and service
- Maintain "No Idling" policy at the Landfill to reduce emissions and fuel use
- Implement environmentally preferable purchasing (EPP) policy for vehicles
- Establish policy that 50% of new vehicles purchased for the County fleet will be hybrid or flex fuel vehicles
- Make waste cooking oil from Jail and Expo kitchens available for biodiesel
- Provide information about options for flex fuel and hybrid vehicles
- Participate in the Treasure Valley Clean Cities Coalition
- Report annually to Department of Energy the quantity and type of alternative fuel vehicles in the County fleet, miles traveled per year, fuel type, and alternative transportation mileage for County employees
- Evaluate options to increase use of ethanol-blended fuel
- Manage alternative transportation program
- Track employee incentives for vanpool riders
- Oversee County's free bus service program for employees and quantify usage
- Install bike racks and repair stations at County facilities
- Promote May in Motion to stimulate regular ridership among employees
- Work with the Parks and Waterways Department to secure funding for improvements and ongoing maintenance of the existing trail system
- Provide resources such as construction management for trail repairs and improvement projects

Employee Transportation and Parking Program

Ada County partners with the Ada County Highway District, Valley Regional Transit, and others to bring employees some great alternatives to driving to work. While employee parking is available at all County facilities, Ada County also provides easy, affordable alternative transportation options to reduce the need for parking and reduce commuter traffic, while improving air quality in Ada County.

Bicycles

Bike racks are located at all Ada County facilities for public and employee use. Free, secured bike storage is available to employees in the Civic Plaza parking garage, east of the Courthouse in downtown Boise. Shower facilities are provided in some County locations for employees who walk or bicycle to work. Contact the Operations Department for locations and access codes. **Green Bikes:** The Boise GreenBike system is available to Ada County employees with a free annual membership (\$70 value).



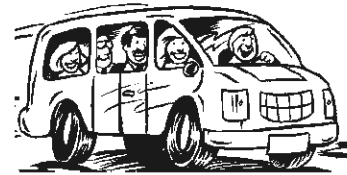
Bus Passes

All regular Ada County employees can ride the bus for FREE using their employee id card, including employees who commute between Ada and Canyon counties. Just hop on and present your id card!



Commuteride Vanpools

Commuteride is a local vanpool program run by the Ada County Highway District. Ada County employees are eligible for a free 1-month trial. New regular riders then receive a \$20 transi-check for months 2-4 (provided by ACHD) plus a \$32 voucher (provided each month by Ada County BOCC) which are applied toward the monthly fare. The rider pays any remaining amount. Fees vary depending on routes. Checks and vouchers are distributed each month by the Operations Dept. Contact for more details.



Guaranteed Ride Home

BE SURE TO SIGN UP FOR THE GUARANTEED RIDE HOME PROGRAM IF YOU REGULARLY USE ALTERNATIVE TRANSPORTATION. Commuters in carpools, vanpools, buses - even cyclists and walkers - are eligible for reimbursement for a taxi ride home for emergencies or overtime situations. The participant must be registered with Commuteride prior to the taxi ride and must have arrived to work using one of the modes listed above. An annual maximum benefit per participant is six taxi rides or a total cost of \$300.00. This program is funded by ACHD.



Parking - Downtown

Limited free or metered parking is available downtown near the Courthouse on a first-come, first-served basis. Employees may purchase a parking space in a surface lot or in the parking garage. Free monthly parking is available downtown for employees who carpool with at least 1 other County employee. Drivers must share a single keycard, but there is no fee for the card. Vanpools and vanpool drivers are also eligible for free, preferred parking.



County Fleet

The County owns over 500 vehicles for use by employees, with 232 of them assigned to the Sheriff's Office. The County operates two fuel islands and several vehicle shops to support its fleet. Replacing old vehicles allows the County to reduce fuel costs through increased efficiency and alternative fuel choices. As of 2017, 29% of the County's vehicles were either hybrid or flex fuel (able to run on 85% ethanol fuel) up from 25% in 2015.

PROCUREMENT, RECYCLING, & WASTE GOALS

Enhance the sustainability of the products entering County Operations, work towards minimizing the volume of purchases and incoming resources, and empower staff to make informed and responsible purchasing decisions. Reduce County-wide waste by implementing comprehensive reduce, reuse and recycling practices. Protect the environment through the proper disposal of waste.

OBJECTIVES

- Coordinate with procurement department to adopt environmentally preferable purchasing (EPP) practices
- Assist Information Technology in developing best management practices (BMP)'s for equipment purchases
- Increase recycling rates and promote waste reduction in County operations
- Improve and expand options for recycling at the Landfill

TASKS TO SUPPORT OBJECTIVES

- Explore implementation of green procurement standards and certifications
- Develop sustainable procurement plans for all County operations where practicable that reflect the highest feasible efficiency and lowest life cycle costs
- Purchase products made with recycled material when practical and feasible
- Consider efficiency in the cost analysis equation when making purchasing decisions
- Provide and encourage the use of non-disposable wares in breakrooms
- Incorporate PC purchasing standards into overall County EPP program
- Reuse and recycle PCs and other electronics
- Establish and support recycling programs for all County-owned facilities
- Develop incentives and campaigns to increase employee involvement in recycling
- Adopt paper reduction policies such as double-sided printing , electronic records management, and paperless workflow strategies
- Use shredding service in place of paper shredders to reduce everyday office waste and increase paper recycling
- Use secure shredding service when purging large volumes of County records, ensuring material is recycled and conserving landfill space
- Support and foster partnerships with local material reuse programs
- Support wood recycling program
- Maintain on-site recycling stations
- Provide roll-off bins for self-sorting of recyclable material
- Develop construction waste recycling program
- Facilitate recycling of gypsum for LEED projects within the County
- Continue incentives to Contractors who source separate material

OUTREACH & EDUCATION GOALS

Clearly communicate goals, progress, and campaigns to stakeholders and participants by providing valid and accurate information and resources to achieve success. Engage employees in sustainability activities and foster a spirit of teamwork and innovation and progress.

OBJECTIVES

- Promote sustainability internally to Ada County employees throughout all departments
- Create a Best Practices Plan for cleaning services, landscaping crew, and building occupants on resource use and energy conservation and share with stakeholders
- Proactively promote public image and community involvement externally to Ada County residents
- Foster peer exchange through meetings with other counties, building owners, maintenance staff, etc. to share ideas

TASKS TO SUPPORT OBJECTIVES

- Develop a program and master plan for a Sustainability Education Program
- Implement communication and education campaigns to promote and report on the County's sustainability activities and best practices
- Increase employee engagement and involvement in conserving energy and natural resources
- Mentor other organizations and departments to develop sustainability plans and metric
- Create a forum for conversation and idea development among staff
- Train custodial and management staff on best green practices
- Educate building occupants about basic building systems, energy efficient operations, and sustainable principles
- Identify and promote green office practices
- Explore implementing Integrative Pest Management and other green landscaping practices to minimize the introduction of harmful chemicals
- Implement multimedia marketing/PR program for Ada County's Strategic Plan for SORC to Ada County residents
- Keep County website updated with current information about projects and facilities
- Expand sustainability information on the website and social media
- Establish channels for communication with the public
- Use Earth Day, America Recycles Day, and other events to promote awareness of SORC
- Provide green building tours to individuals and groups as requested
- Collaborate with and support the work of outside organizations and agencies' sustainability programs and efforts
- Use Ada County's Environmental Advisory Board to address ecological concerns in the county

FACILITY AWARDS AND RECOGNITION

Ada County seeks opportunities to raise public awareness about its energy efficient operations and high performance facilities through various awards and certification programs.

ENERGY STAR

ENERGY STAR is a voluntary U.S. Environmental Protection Agency (EPA) program that delivers environmental benefits and financial value through superior energy efficiency. By certifying top-performing products, homes, and buildings, ENERGY STAR helps us all make energy-efficient choices. It's best known as the little blue mark on consumer products, but since 1992, EPA has also worked with businesses and public-sector organizations to transform the way that commercial buildings and industrial plants use energy. On average, ENERGY STAR certified buildings use 35 percent less energy and cause 35 percent fewer greenhouse gas emissions than similar buildings.

Through ENERGY STAR, EPA offers the 1 – 100 ENERGY STAR score, which is available for more than 30 different types of buildings and plants. An ENERGY STAR score enables you to compare your facility's actual energy performance to similar facilities nationwide. A score of 50 represents typical performance, while a score of 75 indicates that your facility performs better than 75 percent of all similar facilities nationwide. and earns the ENERGY STAR plaque.

2004	Courthouse & Administration Building	76
2005	Courthouse & Administration Building	75
2006-2008	Courthouse & Administration Building	82
2009-2010	Courthouse & Administration Building	81
2011	Courthouse & Administration Building	84
2012	Courthouse & Administration Building	82
2013	Benjamin Building	77
2014	Courthouse & Administration Building	75
2015	Benjamin Building	78
2016	Courthouse & Administration Building	79
2017	Benjamin Building (in process)	80



LEED® Certifications

As a member of the US Green Building Council since 2003, Ada County uses the Leadership in Energy and Efficiency Design (LEED) program to ensure we build green, high performance buildings. Ada County has the distinction of earning the first LEED certification for any building in Idaho with the Ada County Courthouse.

2005	Courthouse & Administration Bldg	LEED-EB Silver
2006	Development Services Remodel	LEED-CI Certified
2006	Barber Park Headquarters	LEED-NC Certified
2008	Weed, Pest, & Mosquito Abatement	LEED-NC Silver
2008	Paramedics Station, Meridian	LEED-NC Silver
2009	Civic Plaza Office Complex	LEED-CI Gold
2010	Paramedics Station, Star	LEED-NC Gold
2012	Paramedics Administration Bldg	LEED-NC Silver
2015	Paramedics Station, Ridenbaugh, Medic 17	LEED-NC Silver

EB - Existing Building, NC - New Construction, CI - Commercial Interior





LEED® Certified Building Projects



May in Motion Alternative Transportation Awards

Ada County partners with the Ada County Highway District and Valley Regional Transit to provide employees with alternatives to driving to work. May in Motion is an annual event that allows organizations to become Alternative Transportation Champions and gain recognition for their employee participation and transportation benefits.

2007	Alternative Transportation Champion Award	Bronze
2008	Alternative Transportation Champion Award	Silver
2009	Alternative Transportation Champion Award	Silver
2010	Alternative Transportation Champion Award	Silver
2011	Alternative Transportation Champion Award	Silver
2012	Alternative Transportation Champion Award	Silver
2013	Alternative Transportation Champion Award	Silver
2014	Alternative Transportation Champion Award	Silver
2015	Alternative Transportation Champion Award	Silver
2016	Alternative Transportation Champion Award	Silver
2017	Alternative Transportation Champion Award	Gold



Other Achievements

2004	EnviroGuard Award from the City of Boise
2008	Award of Citation in Architecture from The American Institute of Architects, to McKibben+Cooper Architects for the Barber Park Administration and Raft Rental buildings
2008	Best Green Building Project in Idaho under \$5 million from The Intermountain Contractors, to CSHQA Architects for the Civic Plaza T1 project
2010	ASHRAE High Performing Buildings Magazine, Summer edition, 10-page article on Courthouse
2012	NACO Energy Efficient County Buildings study
2014	Kilowatt Crackdown, Special Recognition Award: Most Dedicated – Benjamin Building
2015	Ada County Named a Bronze Bicycle Friendly Business by the League of American Bicyclists and formally recognized the Ada County Courthouse as a Bicycle Friendly Facility
2015	Idaho Business Review Top Projects Award: Ada County Landfill Hydrogen Sulfide Scrubber received a 2nd place award in the Infrastructure/Transportation project category as one of the top construction projects in Idaho for 2014! Projects are selected based on overall project quality, execution, scope, and cost factors, and all projects considered were valued at \$1 million or more



*Pictured left to right:
Commissioner Rick Yzaguirre
Commissioner Jim Tibbs
Director of Operations/Landfill Scott Williams
Deputy Director Manager Ted Hutchinson
Commissioner Dave Case*

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Completed and Current Projects

FY 2016-2017

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ADA COUNTY LED LIGHTING UPGRADE

OVERVIEW

The purpose of this project is to upgrade the exterior lighting and selected interior fixtures at the Juvenile Court Services facility with energy-efficient LED lighting. The goal is to control costs by purchasing the LED lamps and fixtures needed for the project and use qualified in-house County staff for the installation.

Ada County is committed to minimizing its impact on the environment by operating buildings efficiently and using lighting effectively. Ada County will only purchase lighting products that meet our specifications, in order to provide a safe and functional facility in the most economical and environmentally friendly manner.



HIGHLIGHTS

Locations:	Juvenile Court Services 6300 West Denton St. Boise, Idaho
Project Cost:	\$21,590
Utility Incentives:	\$5,321
Annual Savings:	47,681 kWh = \$2,700
Completion:	August 2015

INFO CONTACT

Ada County Operations
Scott Williams, Director
Selena O'Neal, Energy Specialist
Telephone: (208) 287-7100
Email: soneal@adaweb.net

MAIN FEATURES

- Replaced 52 exterior wall packs including 70w to 150w high pressure sodium, 100w to 250w metal halides, and 175w mercury vapor lights with LED lights ranging from 13 to 40 watts per lamp
- Upgraded 400 watt parking lot pole lights with 280 watt LED lights
- Upgraded indoor gymnasium T8 lamps with long-lasting LED lights

PROJECT BENEFITS

- Improve lighting and increase safety
- Reduce energy costs
- Longer lamp life reduces risks and staff time spent replacing lights
- New lamps last 5-10 times longer – from 10,000 hours for the wall packs to 50,000 hours with the LED upgrades
- New parking lot lights rated at 100,000 hours which equates to 11 years of continuous use



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PROJECT PROFILE


ADA COUNTY JUVENILE PROBATION SERVICES - WEST

OVERVIEW

The project will deconstruct the existing 2,500 square foot building located at 124 W Franklin Road in Meridian, and design and construct a new, larger building in its place. The new facility is intended to provide office space for probation officers and other employees, as well as meeting space and group rooms to serve the expanding juvenile population in west Ada County.

Demolition of the old building and construction of the new facility will begin in July 2015 with completion planned for the spring of 2016. In the meantime, the 11 Juvenile Probation staff normally housed there will serve about 245 juveniles and their families from the Boise location at 400 N Benjamin Lane.



HIGHLIGHTS

Location:	124 W Franklin Road Meridian, Idaho
Project Size:	5,000 sf
Architect:	Lombard Conrad Architects
General Contractor:	Morgan Construction
Completion Date:	May 2016
Project Cost:	\$1,348,000 (est)

INFO CONTACT

Ada County Operations
 Dave Logan, Director
 Doug Cox, Construction Manager
 Telephone: (208) 287-7100
 Email: dcox@adaweb.net

MAIN FEATURES

- New office space and improved work environment
- Enhanced meeting room facilities
- Increased parking availability
- Improved floor plan to meet service delivery needs

PROJECT BENEFITS

- Supports the mission of the Juvenile Court Services Department to provide professional services that build, reinforce, and sustain skills to enhance the lives of youth and families
- Provides a convenient site in West Ada County for juveniles to meet with probation officers
- Affords appropriate space to provide services in West Ada County eliminating Meridian residents commuting to Boise for same services

ENVIRONMENTAL BENEFITS

- The design concept will maximize sustainability in all five of the categories outlined in the LEED Green Building Rating System including: sustainable sites, water efficiency, energy and atmosphere, indoor environmental quality, and materials and resource efficiency.
- The project is targeting LEED v2009 NC silver-level certification
- Energy performance designed to be above ASHRAE 90.1-2004 standard
- Indoor environmental quality measures will include the use of low VOC adhesives, carpets, paints, and composite woods.
- Demo material will be recycled to the maximum extent possible
- New building materials contain recycled content wherever feasible
- Building materials will be locally sourced wherever possible



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ADA COUNTY WEED, PEST, AND MOSQUITO ABATEMENT ADDITION PROJECT

OVERVIEW

Ada County's Weed, Pest, and Mosquito Abatement Department focuses on controlling the presence of and negative impacts from noxious and invasive plants, nuisance pests, and mosquitos throughout the county.

The department operates from a silver LEED-certified facility, in Meridian, Idaho. Originally built in 2007, the facility consists of a 7,800 sf administrative office, 10,400 sf truck storage and washout building, and 3,500 sf dry chemical storage space.

The project added additional workspace to the existing administration building along with a small laboratory for the Mosquito Abatement staff. Before the addition, staff shared workspace that was constrictive and interfered with the production of the team.



HIGHLIGHTS

Location:	1127 E Pine Meridian, ID
Project Size:	Addition: 2,700 square feet
Architect:	LCA Architects
General Contractor:	Petra, Inc
Completion Date:	April 2017
Project Cost:	\$577,900

INFO CONTACT

Ada County Operations
Scott Williams, Director
Doug Cox, Construction Manager
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The Mosquito Abatement department uses an integrated pest management plan to mitigate the impact of mosquitoes and the threat of West Nile Virus in Ada County. There are three steps to this plan:

- 1. Larviciding;** The first priority of mosquito control, larviciding crews are out Monday - Friday, spring - fall to survey water bodies (like storm drains, catch basins, ponds or other areas of standing water). If larvae or pupae are found, crews treat the water with a biological agent stunting the growth of the young mosquitoes so they cannot grow into flying, biting adults.
- 2. Surveillance;** Evaluating mosquito populations by trapping allows for the most cost effective West Nile Virus monitoring.
- 3. Adulticiding;** treating adult mosquitoes using ultra-low-volume fogging trucks. The pesticide is nontoxic to humans, pets, animals, or larger insects. Trucks are dispatched at night when the Culex species mosquito is active. The Culex species is known to carry the West Nile Virus and to be out between dusk and dawn.

MAIN FEATURES AND BENEFITS

- Approximately 2,700 square feet of additional workspace
- Revised existing reception desk to provide larger area and ADA desk
- New office space for 7 administrative personnel with daylight views
- Improved productivity and work performance
- Separate working space for Mosquito Abatement Agency (MAA) staff
- Laboratory for MAA including sink, eyewash station, and fume hood



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PROJECT PROFILE



ADA COUNTY 911 DISPATCH CENTER

OVERVIEW

The project will design and construct a new 25,000 sf 911 Dispatch Center at the Meridian Campus, near the intersection of Locust Grove and Pine Street. It will be done in three phases: 1- total design of the project, 2-shell and core bid package and construction, 3- interior tenant improvements and the remaining build-out of the buildings and site.

A Request For Qualifications (RFQ) for architectural and construction services was released in February 2014. CTA was selected as the Architects of record. Programming has started with Ada County Dispatch, Ada County IT, and Boise City IT. Ada County Emergency Management will not be a part of the project.



HIGHLIGHTS

Location: Meridian Campus
Pine Street
Meridian, Idaho

Project Size: 25,000 sf

Architect: CTA

General Contractor: tbd

Completion Date: Design: tbd
Construction: tbd

Project Cost: \$7,300,000 (est)

INFO CONTACT

Ada County Operations
Dave Logan, Director
Bruce Krisko, Construction Manager
Telephone: (208) 287-7100
Email: bkrisko@adaweb.net

MAIN FEATURES

- Consolidated 911 and Dispatch center for all of Ada County including medical, fire, and local law enforcement agencies
- Administration space for approximately 14 offices and restrooms
- A dispatch floor with approximately 25 dispatchers
- Training room with capacity for 10 people

PROJECT BENEFITS

- Meridian Campus provides a centralized location and meets the known space and hazard-avoidance requirements
- Portions of the facility will meet critical services criteria for data centers
- Will be NFPA 1221 compatible, which means fully redundant systems and structure designed to withstand certain impacts and earthquake loads

ENVIRONMENTAL BENEFITS

- The design concept will maximize sustainability in all five of the categories outlined in the LEED Green Building Rating System including: sustainable sites, water efficiency, energy and atmosphere, indoor environmental quality, and materials and resource efficiency. (LEED certification will not be part of the project.)
- Energy performance will be designed to be approximately 21% above ASHRAE 90.1-2004 standard
- Indoor environmental quality measures will include the use of low VOC adhesives, carpets, paints, and composite woods.
- Demo material will be recycled to the maximum extent possible
- New building materials contain recycled content wherever feasible
- Building materials will be locally sourced wherever possible



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ADA COUNTY PARAMEDICS STATION 23 - GLENWOOD

OVERVIEW

The project was a complete remodel of the existing paramedic response station at 5870 Glenwood, to provide an efficient facility for a two to three person crew, and facilitate the performance of the critical services provided by the Ada County Paramedics. The program consisted of an interior and exterior remodel of the existing 6,084 square foot building and surrounding landscape.

The station is located in Garden City but is adjacent to the Ada County Fairgrounds and considered to be part of Ada County. Basic construction elements included remodeling the facility to accommodate living quarters and work areas for ACEMS staff stationed at the facility. The existing building footprint provided the limit for construction, with no expansion or alteration of the building's exterior footprint.



HIGHLIGHTS

Location:	5870 Glenwood, Garden City, Idaho
Project Size:	6,084 square feet
Architect:	McKibben+Cooper Architects
General Contractor:	Scott Hedrick Construction
Completion Date:	July 2017
Project Cost:	\$799,500

INFO CONTACT

Ada County Operations
 Scott Williams, Director
 Doug Cox, Construction Manager
 Phone: (208) 287-7100
 Email: dcox@adaweb.net

MAIN FEATURES

- Three new bedrooms utilized existing office spaces in rear of building, each with independent HVAC controls along with operable windows to provide natural light and ventilation.
- Dayroom, kitchen, report writing room, and 2 ADA-compliant restrooms
- Remodeled interior and exterior equipment storage spaces and ambulance bays
- New energy efficient windows, garage doors, flooring, and covered porch
- Walls removed to open training room and living area
- All exterior doors equipped with card readers for entry control
- New metal roof with snow rails to replace old asphalt single roof

ENVIRONMENTAL BENEFITS

- Though not certified, the design concept maximized sustainability in all five of the categories outlined in the LEED Green Building Rating System including: sustainable sites, water efficiency, energy and atmosphere, indoor environmental quality, and materials and resource efficiency
- Energy performance designed to be approximately 21% above ASHRAE 90.1-2004 standard
- Indoor environmental quality measures include the use of low VOC adhesives, carpets, paints, and composite woods
- Sustainable site considerations include stormwater design, heat island effects and water efficient landscaping
- New building materials contain recycled content and were locally sourced wherever feasible



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BOISE RIVER INSTREAM HABITAT PROJECT

OVERVIEW

This is the first-of-its-kind aquatic habitat enhancement project designed to improve fish habitat along a stretch of the Boise River known to be one of the finest urban trout rivers in the country.

The project placed engineered log structures and boulder clusters in the river. The log structures were partially buried in the riverbanks and anchored to the river bottom with log pilings positioned into excavated pools to provide ample resting area for fish. The riverbanks were replanted with native willow species.

The project was conceived by the Ada County Environmental Advisory Board, which is made up of staff from Ada County, the Boise River Enhancement Network, Idaho Department of Fish and Game, Trout Unlimited, The Freshwater Trust, and Fulcrum/Enel Green Power North America.



HIGHLIGHTS

Location:	Boise River main channel, near Eckert Bridge & Barber Park
Design Engineer:	ID Dept of Fish & Game, Jeanne McFall, PE
Contractor:	T-O Engineers
Completion:	December 2016
Project Cost:	\$45,000 Budget + In-Kind Contributions

CONTACT INFO

Ada County Parks and Waterways
Scott Koberg, Director
Telephone: (208) 577-4575

ID Dept of Fish and Game
Jeanne McFall, PE
Fisheries/Hydraulic Engineer
Telephone: (208) 287-2792

PROJECT BENEFITS

- Improved fish habitat can sustain a healthier and more diverse range of fish populations
- Improves tourism and angling opportunities along the river which provide economic benefits to the community
- Located in a place that does not disrupt or interfere with other prominent river activities
- Collaboration between regional governments and community groups encourages community-based solutions

ENVIRONMENTAL BENEFITS

- Channel complexity increased and dynamics improved to provide adequate fish habitat
- Provides more cover and current breaks for fish
- Native willow species along banks prevent erosion and improve the health of the natural ecosystem
- Integration of recycled wood debris promotes sustainability and conscious resource use



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Contacts

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Jim Tibbs, District 1 Commissioner

Rick Visser, District 2 Commissioner

Website: www.adacounty.id.gov

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