AGENDA
COMMUNITY SUSTAINABILITY ADVISORY BOARD
CITY OF GOLDEN, COLORADO

Regular Meeting
March 28, 2012
6:30 PM

City Hall Council Chambers
911 10th Street

1. Roll Call & Sustainability Pledge

The mission of the Community Sustainability Advisory Board is to assist the City of Golden in achieving its ten-year sustainability goals as adopted in Resolution 1793. In order to facilitate achievement of these goals, the Board will lead, encourage, enable, and empower the citizens, visitors, and people who work in Golden, to live in a sustainable manner.

2. Approval of the Agenda

3. Approval of the Minutes from February 22, 2012

4. Public Comment

5. Staff and Board Updates

6. Action Items

   A. Ecosystem Health Strategy 7:00 – 7:30 pm

      After review of final edits to a proposal to define the City’s sustainability goal regarding ecosystem health, the Board will decide whether to forward the proposal to City Council for approval.

   B. Update on City LEED certification 7:30 – 8:00 pm

      Staff will provide details on progress made toward achieving the United States Green Building Council’s LEED Silver certification for the Public Works building remodel project.

   C. 2012 Work Plan 8:00 – 8:30 pm

      The Board will review a proposed memo to City Council outlining specific projects that the Board will work on for the next one to two years.

7. New Business

   A. Agenda topics for next meeting April 25th 8:30 – 9:00 pm

8. Adjourn

The City of Golden does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in the provision of services. For disabled persons needing reasonable accommodation to attend or participate in a City service, program or activity, call (303) 384-8097 as far in advance as possible. (Disabled access is available from the north side of the building).
CALL TO ORDER – BUSINESS MEETING:

Karen called the business meeting to order at 6:35 p.m.

APPROVAL OF AGENDA:

Changes to the agenda: the action item on Ecosystem Health Strategy will be deleted. A new item - LEED update on PW remodel will be added after Sustainable City Events. With a motion from Chuck and a second from Whitney, the amended agenda was approved.

APPROVAL OF MINUTES FROM JANUARY 25, 2012:

With a motion from Chuck and a second by Kurt, the minutes were approved as written.

PUBLIC COMMENT:

none

STAFF AND BOARD UPDATES:

STAFF:

The Boards and Commission Dinner is next Wednesday, Theresa followed up with Board members to see who would be attending.
Council has started interviews for the four vacant positions on the Board. Whitney and Kurt have re-applied, but there will be at least two new members when Council makes the appointments on March 8, 2012. Theresa discussed the roles of various members and the information she provided to Council about which positions were open and what roles continuing Board members could fill.

Theresa talked about scheduling a Board retreat, which would include both current and new members. The Board talked about the goals of a retreat, the timing and length of a retreat, the need for a facilitator, and location. The Board would like to have a full day retreat on a Saturday with some facilitation. Theresa will solicit proposals for a facilitator. Tentative date: Saturday, April 28th. Theresa will bring back options and a proposed schedule to the March meeting.

Theresa provided an update on Council’s recent retreat and handed out the background notes and a summary of the retreat which included some goals for the CSAB over the next two years.

Theresa provided copies of the final 2011 budget and a status sheet for the 2012 budget that included programs that have been discussed for potential funding in the past, however, no specific projects have been funded in 2012 or any of the budget allocated.

Karen and Theresa discussed the status of the revised city website and how sustainability information is presented and where it can be found. Karen had concerns with how the website was organized and that some information is buried and difficult to find. She challenged board members to go to the website and try and find information about sustainability and report back to Theresa.

Economic development – Karen provided feedback to Mark Heller at GURA on the Buy Local program and the potential for the Board to meet with that group. The Board is interested in coordinating with this group and discussed opportunities.

Hillary participated in a presentation by Michael Shuman last night and provided an update on a new food initiative called the 25% shift, which includes shifting 25% of food production (all facets) locally. She is again re-energized at the value Michael Shuman could bring to Golden. His work with Boulder and Denver could open up an opportunity for Golden to take advantage of his being in Colorado.

RETAC update – First meeting looked at large scale renewable including solar and wind and the potential opportunities of aggregating PPAs with Jefferson County or CSM. Next two meetings have been scheduled and the next meeting will focus on biofuels and geothermal.

Theresa proposed a joint meeting with the Planning Commission and the City Building Official on the 2012 building codes.

Commercial CFL program – downtown merchants have requested collection and disposal updates for CFL.

RTD update: pedestrian bridge over Hwy 93 construction will begin in fall 2012 and be complete in spring 2013. The circulator bus has received funding and RTD will operate the bus. There will be two
buses when the light rail opens and three in 2014. Routes have been developed and will have a loop and call-in or on-demand route to check points.

**BOARD:**

Gunter provided input on the modifications to the energy efficiency brochure for homes. He is concerned that the addition of a chapter on how to do improvements to historical homes only delays the publication of a document that has languished for an unreasonable amount of time. He would have preferred that the document move forward and allow the HPB add information to a future version. Theresa discussed the status of completing the document and getting it published on the web and in print. The delay in this project being completed is an example of the types of delay that frustrates the Board. They would like this to move forward and not be further delayed by the addition of a new chapter if the rest of the document is ready to go.

**ACTION ITEMS:**

A. Criteria for 2012 Sustainability Awards

Theresa provided potential criteria that could be used to award the annual sustainability award (attached). The Board liked the criteria but wanted to change some of the language to encourage people to nominate friends and neighbors.

B. Sustainability City Events

Theresa provided some criteria for the Board to consider that could be applied to public events. The criteria are focused on solid waste diversion, use of water stations, and use of bicycle corrals. The criteria are based on the size of the event with larger events needing to do more. There was some discussion of whether or not the criteria were aggressive enough and would be meaningful. The Board decided to require the additional requirement of volunteers to staff waste stations, banning water bottles, including composting, and promoting control of wastes upfront in the products that vendors sell. The Board recommended that these additional requirements be phased over a defined period – say two years.

C. LEED Update PW Remodel

Rescheduled for March.

**NEW BUSINESS:**

*Agenda topics for next meeting – March 28*

- Ecosystem Health
- Environmental Film Festival Update
- LEED Update
- Budget review
ADJOURN:

Meeting was adjourned at 9:00 p.m.
Community Sustainability Advisory Board
Six Month Schedule - 2012

Meeting Date | Agenda Item 1 | Agenda Item 2 | Agenda Item 3 | Agenda Item 4
--- | --- | --- | --- | ---
3/28 | Ecosystem Health | LEED update for Public Works building | 2012 Work Plan |  
|  |  |  |  |  
4/25 | Budget Requests (CEFF phase 2, Golden Earth Days Council, Mitchell School Garden, LED Light program) |  |  |  
|  |  |  |  |  
4/28 | Board Retreat | 2012 Priorities for the Board - review deficiencies in Strategic Plan | CIRSA Video |  
|  |  |  |  |  
5/16 | Special Joint Study Session with Planning Commission | 2012 IECC code adoption; presentation by Gerry George, Chief Building Official | Circulator Bus Routing options - discussion and input |  
|  |  |  |  |  
5/17 | Study Session with City Council | 2012 Work Plan |  |  
|  |  |  |  |  
5/23 | cancel meeting? |  |  |  

Future meeting topics:
- Municipal fleet vehicle fuel.
- Traffic reduction strategies for Washington Avenue (Gunter)
- CSM joint meeting with CSAB

- Housing Study
- Green home marketing/MLS listings
- Commercial Sector Outreach
<table>
<thead>
<tr>
<th>Description</th>
<th>Contractor</th>
<th>Budget</th>
<th>Deliverables</th>
<th>Due Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Services</td>
<td>2012 Budget Total</td>
<td>$5,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator for CSAB Retreat 4/28</td>
<td>?</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>remaining budget</td>
<td></td>
<td>$5,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainability Programs</td>
<td>2012 Budget Total</td>
<td>$40,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainability Awards</td>
<td></td>
<td>est $1,000 based on 2011 expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Greener Golden (Garden In A Box)</td>
<td></td>
<td>est $2,000 based on 2011 expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA Pro Cycling Challenge</td>
<td></td>
<td>smaller than $8,000 expenses in 2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Co Env. Film Fest efforts</td>
<td>CEFF.org</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEED Silver project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecosystem Health education outreach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar Tour (Golden Earth Days Council)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED Commercial Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>remaining budget</td>
<td></td>
<td>$40,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The City of Golden seeks to address one of the sustainability goals within Resolution No. 1793:

Ensure that Golden sustains a clean, stable water supply into the future; Improve the health of the ecosystem associated with Golden waterways.

To this end, an Ecosystem Health Compliance Plan addresses the following:

1. Habitat/Species Assessments and Management
2. Water quality Monitoring
3. Regulatory Tools
4. Waterway Maintenance Programs
5. Evaluation and Future Efforts

As further mandated by Resolution No. 2016, “Ecosystem Health” will be defined by more than one specific metric to cumulatively measure ecosystem indicators.

Lastly, Resolution No. 2047 outlines performance indicators to measure the goal: Number of projects shown to promote the health of the Golden waterway ecosystem, number of stream or ditch restoration projects, channel maintenance programs, and erosion control plans for in-city locations and adjacent to city reservoirs.

1. Habitat/Species Assessments

Completed Assessments for Habitat Improvements

- **Clear Creek Whitewater Park** Built in 1998 for recreational canoeing and kayaking, the course is built with natural boulders that both protect the stream bank from erosion and create pools and eddies at constructed boulder drop structures. Golden successfully obtained recreational water rights of 1,000 cfs in a precedent setting case before the Division Water Court and Colorado Supreme Court in 2003. This right ensures a flow of 1000 cfs through the Clear Creek Whitewater Park between May and July.

- **Trout Unlimited Golden Mile** The West Denver Chapter of Trout Unlimited completed the Golden Mile stream restoration project in spring of 2009. The project reconstructed and restored approximately 2,200 linear feet of stream and stream bed. The project extends from the upper end of the City’s kayak course, upstream into Jefferson County. In conjunction with the kayak course, the project provides prime trout habitat for over one contiguous mile of stream.

Completed Assessments for Species Inventories
Rapid Bioassessment of Kinney’s Run at Fossil Trace Golf Course
In 2005, the City partnered with the Colorado Division of Wildlife to conduct a macroinvertebrate inventory of the Kinney Run drainage located within the Fossil Trace Golf Course. Rapid bioassessment protocols designed to provide basic aquatic life data for water quality management purposes were used.

Rapid Bioassessment Protocols were designed as inexpensive screening tools for determining if a stream is supporting or not supporting a designated aquatic life use. The protocols can also be applied to other program areas such as characterizing the existence and severity of impairment to the water resource, helping to identify sources and causes of impairment, evaluating the effectiveness of control actions and restoration activities, supporting use attainability studies and cumulative impact assessments, and characterizing regional biotic attributes of reference conditions.

Endangered Species Inventory - Orchids
In 2010, the City conducted a natural resource assessment (NRA) to evaluate the vegetation, wildlife and other natural resources within the City of Golden Clear Creek Park study area. This assessment provided guidance for the City of Golden and Wenk Associates with completing a Master Plan for the Clear Creek corridor. Natural resources assessed include type and quality of vegetation communities, wetland assessment, noxious weeds and wildlife habitat.

Tree Inventory and Valuation
In 2009 the City of Golden implemented a program to inventory, inspect and assign valuations to municipally owned trees. The trees are spatially located and inspections, which include a photographic record, commenced. To date, the City has inventoried nearly 8,000 trees. Tree canopy cover intercepts stormwater, minimizing negative effects of stormwater runoff on water quality in urban areas.

2. Water Quality Monitoring

- Drinking Water Program, raw water supply

- Baseline Stream Monitoring Clear Creek
A water quality monitoring station was installed in 2005 and continues to operate on Clear Creek immediately upstream of the City’s water supply diversion. The purpose of this station is to characterize water quality and constituent loading conditions in Clear Creek at the water supply intake. Results will be used for future water quality planning and management.

The sampling station, CC-59, was established as part of a cooperative monitoring agreement with the Standley Lake Cities (Northglenn, Westminster, Broomfield, and
Arvada). The City of Golden operates and maintains CC-59 while samples are analyzed jointly by the participating cities. Both ambient and storm event water quality samples are collected at CC-59. Continuous recording water quality probes along with a precipitation gauge are operated seasonally from March to October.

- **Event Mean Concentration Baseline Study**
  The City of Golden’s Environmental Services Division conducted stream water quality studies from 2004 through 2006 with the goal of obtaining stormwater quality data for streams that convey storm drainage within the City. During the study, three tributary streams were monitored including Kinney’s Run, Arapahoe Gulch, and Tucker Gulch.

- **Upper Clear Creek Watershed Association (UCCWA) Event Mean Concentration Study**
  UCCWA conducted a water quality study in the Clear Creek Basin to ascertain chemical constituent Event Mean Concentrations (EMC) in stream stormwater runoff. The EMC study involves collection and analysis of stream water samples during summer rainstorm runoff events. The objective is to gather storm event data that can be used to evaluate relative contributions of chemical constituent concentrations by various land use and cover types.

- **Tucker Gulch Event Mean Concentration UCCWA Study**
  The initial phase of the UCCWA Event Mean Concentration Study was conducted using various sample locations throughout the watershed to develop a baseline for different land use characteristics. The study was conducted in 2000 and 2001 and included lower Tucker Gulch in Golden to be representative of foothills urban area.

- **Tucker Gulch Stormwater Event Mean Concentration, wildland fire influence**
  In response to the Indian Gulch Fire in the spring of 2011, the City of Golden’s Environmental Services Division conducted a water quality study on Tucker Gulch to determine the influence, if any, of runoff from the burn area on water quality.

- **Source Water Assessment Program**
  The Colorado Department of Public Health and Environment (CDPHE) completed a source water assessment for Golden in 2004. The Assessment is required by the Safe Drinking Water Act and serves to analyze the potential susceptibility of public drinking water sources to contamination. The purpose of the Assessment is to assist public water systems in preventing accidental contamination of untreated drinking water supplies. While the City is invested in maintaining a safe public drinking water source, the Assessment conducted by CDPHE is dated and better materials exist to measure sources of potential contamination. For example, after the assessment, the State completed the Source Water Protection Plan through a 319 grant, which may provide more current information.
3. Regulatory Tools

Municipal Code adoptions

The following sections within the Golden Municipal Code address require best practices during construction:

13.18 Upstream source water is protected through the Water Works Permit which states, “The purposes of these provisions are to promote the health, welfare and safety of the inhabitants of the City of Golden by maintaining and protecting the city's waterworks from damage, harm or injury and preventing the pollution of the city's water supply.”

13.30 Stormwater Quality requires control of erosion and sediment during land disturbing activities; requires the long term operation and maintenance of water quality structures; and prohibits anyone from disposing of any substance other than naturally occurring stormwater into the storm sewer system.

15.18 Street, sidewalk and drainage standards require planning and easements for, and design, inspection, operation and maintenance of stormwater facilities.

18.40 Site Development Regulations require designs to promote water quality and require maintenance of permanent measures. Two Sustainability Menus for commercial and residential developments require the use of measures that will capture initial runoff, or the majority of runoff from our most frequently occurring small storms.

Best Practices

4. Waterway Maintenance Programs

City of Golden Channel Maintenance program

Golden has a comprehensive Stormwater Maintenance Plan, last revised in November 2009. Maintaining an adequate stormwater quality and stormwater conveyance system is a combined and cooperative effort between the Stormwater Division, Engineering and Environmental Services Division of the Public Works Department. Engineering also works closely with the Urban Drainage and Flood Control District which is instrumental in providing Master Drainageway Planning and Maintenance assistance. The Environmental Services Division is actively overseeing all activities affecting stormwater quality to insure that the City of Golden meets or exceeds all Local, State, and Federal requirements. The Stormwater Division performs inspections and maintenance of the components that make up the drainage system. The system is comprised of two basic categories:

- Subsurface System – Inlets, Manholes, and Pipes
- Surface System – Drainageways and Detention Ponds
Urban Drainage District program
The City of Golden partners with the Urban Drainage and Flood Control District to address the following programs:

- Master Planning
- Design, Construction and Maintenance, including routine debris removal, channel rehabilitation, and channel reconstruction.
- Floodplain Management
- Information Services and Flood Warning

The Master Planning Program addresses four major areas of Golden’s waterways:

- Master planning, including major drainageway and outfall systems planning.
- Drainage criteria manuals for local governments and the District.
- Support of local government stormwater NPDES discharge permitting efforts.
- Special projects, such as developing and maintaining criteria and technical information for stormwater quality and quantity best management practices, benefit-cost analysis, wetland issues, software development and other projects that contribute to the advancement of regional stormwater technology.
- Current efforts include a 2012 project to construct silt removal mechanisms in Tucker Gulch.

Master plans are an important tool to help identify projects for construction and provide valuable input to the District's Five Year Capital Improvement Program. They also help guide new land development projects to be consistent with regional drainage needs, and help to identify and acquire rights-of-way for future capital improvements.

5. Evaluation and Future Efforts

Measurement and Evaluation. In order to gauge effectiveness of the various programs and projects, this document will be updated periodically to reflect the results of programs and to direct future efforts. Past program results include:

- Over the past four years, volunteers have spent more than 175 hours working on restoration and maintenance projects. The projects include volunteers from MillerCoors that worked on erosion control behind the old Ford car dealership; volunteers from Colorado Christian College who worked to restore portions of Welch Ditch; numerous volunteers helped create the high quality wetland and pond areas at the Fossil Trace Golf Course; and organizations who contributed to erosion control projects at Apex Park.
- The result of the Orchids Study conducted in 2010 found several orchid plants in the Clear Creek area. To address protection of the orchids, the City has delineated areas to prevent trampling by hikers in springtime and has also attempted to minimize media promotion of these areas.
Future Efforts & Potential Projects. Three key areas have been identified as strategies toward improving the health of Golden’s ecosystem and waterways: Maintenance projects, education and outreach efforts and strengthening ties with regional partners.

1. Waterway Maintenance Projects. The following projects are highlighted on the map (attached) and represent potential projects to address ecosystem health (not prioritized):

- **Tucker Gulch.** Golden has been actively restoring and maintaining the entire Tucker Gulch area for many years. In 2011, a significant amount of sedimentation was removed from the lower portion where Tucker Gulch meets Clear Creek. The opportunities to improve the ecosystem of this area are to integrate grade control structures (requiring capital funds) and utilize volunteers to perform simple vegetation maintenance and erosion control.

- **Kinney Run/US 6 Crossing.** This area of the Kinney Run Trail east of the underpass with US 6 is a popular and visible spot because of its wetlands, wildlife and vegetation. Because portions of the Kinney Run ditch cut into the hillside, this project requires some design work but is an overall simple effort to grade the adjacent slopes and add trees.

- **US 6 Trail Erosion Project.** A small, but constant spring flow from the adjacent Jefferson County Building on Illinois Street crosses the regional bike trail along US 6 on the east side. The steeper hill sections in this area create rills that facilitate even greater velocity for runoff. Because this area is potentially within the CDOT right of way for US 6, the City should work with CDOT to find a solution.

- **Lena Gulch.** The area where US 40 (West Colfax Avenue) curves near Heritage Road required a total replacement of the underpass channel for Lena Gulch in 2010. Downstream of this intersection, the Gulch may require significant work to remove brush and improve channel flows. This area is often frequented by herds of elk, deer and coyotes and presents an opportunity to improve overall ecosystem health because of the potential to both habitat and stormwater enhancement.

- **Apex Area.** This gully forms one of the “headwaters” to Lena Gulch and is affected mainly by sheetflows from spring runoffs. A significant amount of vegetation needs to be removed and a redesign of the slope to prevent erosion is also required. Because of this area’s popularity as a hiking and biking destination, the City should work with Jefferson County to use the redevelopment efforts as an opportunity for ecosystem health education.

- **Welch Ditch.** A few feeder gulches in the East Street neighborhood have been naturally diverted as the area was developed over several decades. This results in several instances where runoff deposits sediment (including runoff from cars, roofs, driveways, etc.) on city streets before it is washed into a storm drain. To capture and prevent these sediment loads, some of the feeder gulches should be redirected to the nearby Welch Ditch, a more appropriate waterway.
19th Street.  East of US 6 and on the south side of 19th Street, rainfall and snowmelt run down the sidewalk toward the School of Mines area. Some of this runoff enters Illinois Street, causing intermittent ice buildup during winter. To solve this issue, a silt trap should be incorporated into the flow path. In addition, an ideal place to redirect this runoff would be toward the Fossil Trace Golf Course where it could settle in the main pond.

2. Ecosystem Health Education
   - Property Owner Education
   - Stream bank standards to be integrated into the zoning code should be drafted for Planning Commission review and recommendation to City Council for adoption.
   - Best Practices for Waterway Health. This outreach should focus on behaviors that contribute and detract toward the health of Golden’s waterways. The outreach materials (brochures, website information, etc.) should address car washing at home, use of de-icer materials, dumping grass clippings and brush into gulches and open space areas.
   - Consultant to conduct gap analysis/assessment of overall health of the ecosystem.

3. Strengthen the City’s ties with Waterway Partners
   - Urban Drainage & Flood Control District. The City has long worked with UDFCD to provide routine maintenance on many areas. The District also has a policy to take over maintenance of waterways that have been designed and constructed to meet the District’s best practices. The City should compile and submit a list of areas meeting these qualifications to the District so that maintenance of these areas can be turned over to the District. In 2012, the City should partner with Urban Drainage to apply for joint grants for the Tucker Gulch channel project.
   - Landowners and Communities adjacent to City reservoirs. This education should focus on both the accountability of landowners who are required to maintain drainage areas and to show others how to be a responsible neighbor to these parcels. Curriculum should use principles of Minimizing Directly Connected Impervious Areas (MDCIA) to showcase demonstration projects. The Board will incentivize a select number of homeowners who are interested in implementing types of these best practices. The examples to the community could include a house downspout redirection to landscaping or the installation of grass pavers in a portion of a driveway to allow drainage.
   - Regional water organizations and basin partnerships. The City should continue to participate in organizations such as the Clear Creek Watershed Foundation (CCWF).
   - Identify annual projects in which volunteer organizations can assist the City with restoration and maintenance efforts.
City of Golden Reservoirs

Guanella Reservoir near Empire, CO

Upper and Lower Urad Reservoirs near Henderson Mine, Clear Creek County
Memorandum

To: Community Sustainability Advisory Board
From: Theresa Worsham, Sustainability Coordinator
Through: Mike Bestor, City Manager
Date: March 23, 2012
Re: Public Works Building LEED Update

Purpose of Agenda Item: To provide an update on progress made toward achieving the USGBC LEED Silver certification for the Public Works Building remodel at 1445 10th Street.

Background: Per CSAB’s recommendation and City Council’s approval in 2008 to adopt LEED Silver as a standard for all new municipal construction and remodels over 5,000 square feet, the Public Works building remodel project is currently under construction and being built to the LEED Silver standards.

Three types of LEED standards exist that would be appropriate for this building: New Construction, Commercial Interiors, and Existing Buildings. Prior to construction, City staff believed that using the New Construction standard would be most applicable. Since comparing the New Construction to the Commercial Interiors standard, staff and the contractor concluded that the Commercial Interior standard would be a more appropriate path to pursue. To clarify the difference between the two, both standards still require projects to address the exact same indoor and outdoor sustainable best practices, but the Commercial Interiors standard weights points more heavily toward the interior elements, in which the City has more opportunities in which to meet the standard.

Current Status: There are seven target areas within the LEED standard that projects must address. While the following list does not cover all of the basic requirements, it includes some of the project highlights:

- **Sustainable Sites.** This category addresses primarily exterior improvements. Our expected points include improved stormwater design to prevent sediment runoff, pervious pavement (asphalt), no irrigation for landscaping (xeric plants are planned) and a green cleaning contract for the janitorial service.

- **Water Efficiency.** This category only addresses indoor water systems and the points expected will be for a 30-35% water use reduction tied to the planned
use of efficient fixtures (dual flush toilets, sink aerators, and waterless urinals).

- **Energy & Atmosphere.** Perhaps the section with the greatest potential for points, the focus in this category is on energy efficiency. Expected points include a reduction in lighting power density through the use of LEDs, occupancy sensors in each room, Energy Star appliances and equipment, enhanced commissioning (ensuring all electrical systems are working the way they’re designed to), and a green power contract for 2 years.

- **Materials & Resources.** Most of this category addresses construction waste and reuse of existing materials. Points expected in this category include a 50% diversion rate (recycling of wood, steel, concrete and single-stream materials), purchasing of new materials containing recycled content, and purchase of materials manufactured regionally (within 500 miles).

- **Indoor Environmental Quality.** The health of construction and occupants is the main focus and the City has several opportunities to achieve points here. CO2 sensors, a construction air quality management plan & testing, low-emitting materials (adhesives, sealants, paints, flooring, & furniture), and controls for occupants (lighting, thermal, daylight, and views).

- **Innovation In Design.** These points relate to credit for exemplary performance in sustainability efforts. We’ll attempt to obtain credit for 100% green power, reduced mercury lamps, low-emitting walls and ceiling, and green building education (a case study and tours of the building).

- **Regional Priority Credits.** The USGBC gives additional points based on the projects ability to address specific targets relating to the region’s pressures. Colorado’s regional credits relate to water use, development density & connectivity, and optimizing energy performance.

**Fiscal Impact:** Although the building was designed with several items that would contribute to the LEED certification, other items were not anticipated at the design stage and need to be included:

1. Building Commissioning: $5,000 for service.
2. Upgrade to LED lighting for external wall packs: $3,875.
3. Upgrade to dual-flush toilets: $400.
4. Contractor support for LEED documentation: $909.
5. Occupancy sensors: $1,384.50.

**Recommendations:** The activities described above combined with several other already-planned activities (such as providing recycling for occupants, zero use of CFCs, and a no-smoking policy) should result in the project meeting a Silver certification level (achieving 50-59 points). At the meeting, the Board should consider funding for some or all of the items that contribute to the building’s LEED requirements.
History of the Board

In 2007, City Council created the Community Sustainability Advisory Board (CSAB) through Resolution No. 1789. The Board is authorized for ten years, members are appointed for four and six-year terms, and seats on the Board are designated from a wide variety of technical backgrounds. The Board includes professionals from the following sectors: sustainability, public research, education, business and three at-large positions. In 2011, two of the original Board members resigned and were replaced before completion of their four-year appointments. In March 2012, two more of the four-year terms were filled, for a total of four new members plus the three original six-year appointees. Since being seated established in March 2008, the Board has held regularly scheduled meetings and currently meets on the second Monday and fourth Wednesdays of each month. In the first three years since the Board was established, the Board met twice each month to meet the demanding workload. Currently, with a more focused direction, the Board holds regular public meetings once per month.

In addition to providing annual work plans and other communications, the Board has delivered two key documents to Council: (1) a Strategic Plan, November 2010 and (2) a report on progress towards the City’s sustainability goals, October 2011.

Mission Statement

The Board defines Sustainability as living in a manner that balances improving our quality of life, a healthy vibrant community, and mindful stewardship of the natural resources and environment.

The mission of the Community Sustainability Advisory Board is to assist the City of Golden in achieving its ten-year sustainability goals as adopted in Resolution 1793. In order to facilitate achievement of these goals, the Board will lead, encourage, enable, and empower the citizens, visitors, and people who work in Golden, to live in a sustainable manner.

Goals of the Board

The primary purpose of the Board is to assist the City in achieving the ten-year sustainability goals set by City Council in Resolution No 1793. The key objectives of the Board are as follows:
1. The board will be responsible for securing commitment and assistance from as many residents, visitors, building owners, business owners and their employees as possible and to this end, will:
   a. Conduct all of its proceedings in such a manner as to secure broad public support.
   b. Plan, organize, and sponsor public educational initiatives.
   c. Consider the need for public support when making recommendations to City Council.
   d. Develop and monitor the City’s implementation of a community outreach and communication plan.

2. The Board will continue to keep the City Council advised of its progress and submit a written annual report to City Council and the community. The Board will also update the Sustainability Strategic Plan to meet the goals in Resolution No 1793.

3. The Board will recommend to Council changes to the Golden Municipal Code related to the goals in Resolution No 1793.

4. CSAB will monitor and report on the City’s internal sustainability and environmental programs and advise the City Manager on programs to improve that effort and additional efforts and their anticipated results.

5. The Board will provide leadership, monitoring advice, and reporting for City participation in state national and international programs related to sustainability and improvement of the environment.

Expectations

From Council. The expectations of City Council to the Board are as follows:

1. To receive timely recommendations from the Board pertaining to policy decisions and capital investment.

2. To propose programs and projects that make measurable progress toward achieving the City’s Sustainability Goals.

3. The Board will produce a Community Progress Report to measure the City’s progress each year.

4. The Board will continue to analyze specific community programs and projects to identify their impact to the Sustainability Goals and bring recommendations to Council for funding.

From the Board. The Community Sustainability Advisory Board’s expectations of City Council include:

1. To request the Board’s assistance when research and recommendations are needed regarding sustainability policy decisions.
2. Council will provide feedback and engage in discourse regarding the Board’s proposals and recommendations.
3. Council will commit resources towards meeting the sustainability goals (staff and funding).

Near-term Strategies (1-2 years)

Review Sustainability Goals and Strategic Plan
In conjunction with the following efforts and starting with the October 2011 progress report, the Board will review the sustainability goals, progress towards each goal, and actions identified in the November 2010 strategic plan. The Board will identify appropriate revisions to the Strategic Plan and, if necessary, identify adjustments to the sustainability goals.

Integrate New Board Members
With the recent change in membership, including the addition of two brand new members, the Board will place a priority on activities that will ensure a well-integrated path forward. This will include both a transfer of the institutional knowledge of exiting and continuing Board members and solicitation of new perspectives and innovative concepts.

Complete Key Activities Already Underway
The Board has initiated a number of activities over the past few years that have not been successfully implemented. In order to realize the value of resources invested in these activities, the Board will provide guidance and recommendations to Council and City staff regarding their prioritization and completion. These activities include the following:

1. Publish in hard copy and online the Golden homeowner’s Energy Efficiency Guide.
2. Launch Home Energy Advisor program (i.e., ResourceSmart Golden)
3. Implement low-waste event requirements for public events held in Golden, starting in 2012.
5. Pursue LEED Silver certification for the new public works building.
7. Establish program to promote enrollment in Xcel’s Wind Source program.
8. Implement the Guidebook of Strategic Recommendations for Involvement in Communications, Events and Promotions, prepared in February 2011 by Hanna Design, specifically for the City’s sustainability program.

Comment [KPS2]: Need to verify when we provide guidance or recommendations to which group.
Initiate New Activities
The Board has identified the following new activities as priorities for supporting achievement of the City’s sustainability goals:


2. Facilitate a collaboration of Golden economic groups to discuss and create a plan to address a sustainable economy and promote economic health.

3. Provide recommendations to City Council for the adoption of a city-wide pay-as-you-throw ordinance.

4. Development and implementation of an effective and sustainable circulator bus service between the community and the new RTD light rail station.