

# Resiliency & Sustainability Plan Update

November 2

2015

Through the Town's Environmental Advisory Board, this document intends to provide a brief overview on the progress, achievements, and challenges of sustainability actions that were deemed a priority by Town leadership in 2009. Recommended next steps are also included.

Update and status report on the Town's 2009 sustainability goals

#### **CONTENTS**

2009 Sustainability Plan Background	2
Introduction	2
Status Updates	3
Performance Dashboard	4
Status Reports	5
Energy Conservation And Climate Protection	5
Affordable Housing And Community Serving Commercial	8
Land Use And Open Space	10
Water	11
Resource Conservation, Recycling, & Solid Waste	12
Green Building	16
Mobility And Transportation	19
Watershed Water Quality	21
Air Quality	23
Wildlife Habitat & Physical Environment	24
Next Steps and Recommendations	26

## 2009 SUSTAINABILITY PLAN BACKGROUND

In January 2008 a local citizens' group requested that the Town Council approve funding to develop an Environmental Sustainability Plan for Snowmass Village. The Council made the necessary appropriations and engaged the Rocky Mountain Institute to help facilitate a public process and collect community input on the topic.

In July 2008, more than 50 Snowmass Village and Roaring Fork Valley community members convened to participate in a series of public workshops focused on identifying and prioritizing community environmental issues, problem areas, and goals. In addition, performance objectives were discussed and potential action items were identified. Finally, a set of selection criteria was developed to help the community prioritize action items for implementation.

On February 2, 2009, this Environmental Sustainability Plan was presented and adopted by the Town Council.

## **INTRODUCTION**

The Town of Snowmass Village recognizes that preserving our natural environment and confronting global climate change are fundamental to the ongoing success and enjoyment of our resort community.

In recognition of those issues, which the community has deemed most critical to our sustainability, the plan was built around the following topics:

- 1. Energy Conservation and Climate Protection
- 2. Affordable Housing and Community-Serving Commercial
- 3. Land Use and Open Space
- 4. Water
- 5. Resource Conservation, Recycling and Solid Waste
- 6. Green Building
- 7. Mobility and Transportation
- 8. Watershed Water Quality
- 9. Air Quality
- 10. Wildlife Habitat and Physical Environment

The specific goals and a broad collection of Implementation Concepts that were presented under each of these headings are listed below. Alongside each original goal is a status update based on the actions taken since their adoption in 2009.

#### **STATUS UPDATES**

A status update of each goal area and implementation concept adopted in the 2009 Sustainability Plan is provided below. This update is summarized in the "performance dashboard," and also reported in detail in the individual status updates.

#### PERFORMANCE DASHBOARD

Within each of the original categories established in 2009, many implementation concepts were deemed a priority. Each of these implementation concepts were rated by the EAB and assigned a performance score. The following table provides a quick snapshot of these scores and overall status of our sustainability plan by each category. Each individual implementation concept also has received its own status update, which is available for review in the next section.

	Number of Goals	Number of Goals Needing	Number of Goals Unaddressed or	Total Number of Implementation		
Topic Area:	on Track	Attention	Missed	Goals	Ra	nting
Energy Conservation and Climate Protection	9	2	1	12	<b>S</b>	89%
Affordable Housing and Commercial	4	1	1	6	<b>Ø</b>	83%
Land Use and Open Space	2	2	2	6	()	67%
Water	3	1	1	5	<b>Ø</b>	80%
Conservation, Recycling, and Solid Waste	5	9	3	17	()	71%
Green Building	7	2	3	12	<b>(</b>	78%
Mobility and Transportation	7	3	1	11	<b>Ø</b>	85%
Watershed and Water Quality	3	5	1	9	<u></u>	74%
Air Quality	1	1	2	4	$\otimes$	58%
Wildlife Habitat and Physical Environment	4	3	3	10	()	70%
TOTAL	45	29	18	92	(1)	76%

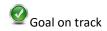
## STATUS REPORTS

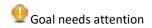
The following provides a complete status update for each category and implementation concept passed in 2009.

# **ENERGY CONSERVATION AND CLIMATE PROTECTION**

- 1. Significantly reduce consumption of non-renewable energy and fuels:
- 2. Increase use of locally generated, non-polluting, renewable energy.

3. Significantly reduce greenhouse gas emissions.			
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS / NOTES	
1. Establish a grant/rebate/subsidy program using Renewable Energy Offset Program (REOP) funds to incentivize and assist in implementing renewable energy generation projects and energy efficiency upgrades		The REOP fund currently has a balance of approx. \$150,956.36.  Community Development has observed the majority of homeowners/builders eligible for REOP have chosen to mitigate their energy intensive systems with renewable energy, rather than pay the inlieu fee. This is a positive sign that carbon is being mitigated on-site, and the program is working as it is intended. Any REOP funds collected are then used for planning or designing renewable energy projects, purchasing energy offsets, or making energy efficiency improvements. Also, thanks to CORE's county-wide programs, Snowmass Village residents benefit directly from their grant programs funded by Aspen's REMP funds, grants, and other revenue sources.	
2. Create incentive program to encourage Town employees to carpool and use public transportation to get to work		The town currently offers an employee shuttle providing transportation to/from Snowmass Village for down valley employees. On average, this shuttle carries approx. 8 employees each day. In addition, in summer, 2014 the SAAB led a project to install 6 new bike racks around Snowmass Village, encouraging cycling and/or bike-and-ride as a more viable transportation option.  Furthermore, the Snowmass Transit website, launched in spring 2014, enhances the ease of use of the Village Shuttle through convenient access to bus schedules and alerts via mobile devices. In the future, the town may consider the following options to incentivize clean commutes: Providing RFTA bus passes to interested employees sponsoring interdepartmental contest/awards encouraging clean commuting practices	
3. Produce "Energy Fair" events in Snowmass Village		In addition to hosting open houses associated with the MBCx project, AREDay will be held in Snowmass Village for the next 3 years, thanks to Snowmass Tourism. Overall, the EAB, Snowmass Tourism, and Public Works have been collaborating to establish new standards for 'green' events in Snowmass Village in a long-term effort to reduce waste, energy, and water use at events, as well as provide educational opportunities to event attendees and organizers.	







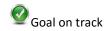
#### ENERGY CONSERVATION AND CLIMATE PROTECTION In 2009 the town funded a carbon inventory identifying emissions resulting from various economic sectors and uses in Snowmass Village and Pitkin County. It is anticipated that an update of this study would cost approximately \$6,000 if Council and staff determined this to be a priority. More recently, the town has focused on establishing a baseline 4. Conduct baseline analysis of for its own operations in an effort to identify the most cost effective and Town Environmental Indicators high impact savings opportunities. This has been accomplished through including energy use (electricity, the MBCx project, which invested approximately \$150,000 of the Holy natural gas, gasoline, diesel) and Cross Community Enhancement Fund to install advanced meters to all other resources for Town primary town facilities to better understand our energy and natural gas organization and the community as usage in real-time, arming facilities maintenance engineers with the a whole tools they need to ensure equipment is operating at optimal levels, and increasing the efficiency of building automation systems. With this project, the town is 'leading by example' in the hopes that a strong ROI and measurable benefits encourage other local businesses and homeowners to follow suit. a. Inventory town-owned In addition to a survey of Town owned properties completed in 2007, the Town of Snowmass Village also contracted with SGM to survey Town buildings, facilities, and vacant land and prioritize opportunities Assets for potential Solar Panel installation locations. However, this to incorporate on-site survey will most likely need to be updated and locations will need to be renewables re-evaluated, based on new technologies in the solar industry. b. Evaluate building shells and mechanical systems to identify See above (measure 4) opportunities for efficiency upgrades c. Investigate new technologies Public Works has implemented and continues to install LED lighting. for higher efficiency street lights d. Evaluate inclusion of hybrid, electric, flex-fuel, and/or The Fleet Maintenance Division consistently evaluates new technologies and their potential applicability in our fleet (Town vehicles, busses, etc.). biodiesel technology in new vehicle and equipment purchases During the 2013 strategic planning process, the seated Council e. Set percentage reduction established a goal of a 20% reduction in carbon dioxide emissions by targets based on baseline data 2020 over a 2009 baseline. 5. Evaluate feasibility of incorporating methane recovery This has been evaluated by Pitkin County. It was found that this project and biomass energy generation was unfeasible. systems at the Pitkin County Landfill







#### ENERGY CONSERVATION AND CLIMATE PROTECTION 6. Develop energy procurement and generation strategy that This was part of the RFP that the town undertook in 2012/2013 and was includes generation of on-site identified as phase two of a multi-phased energy efficiency and energy, renewable energy renewable energy strategy. We are currently wrapping up phase I and purchases, and/or carbon offsets will return to Council with results, and potential future implementation to minimize carbon footprint for projects (likely winter/spring 2015). town operations 7. Identify and remove town This is in progress as the Community Development Department regulations that serve as barriers evaluates all regulations in totality. Renewable energy generation is a to developing renewable energy common topic that planners consider during pre-application phases of generation projects any development. The town's website and social media properties provide nimble 8. Create informational resources platforms to compile and share real-time information related to energy outlining strategies for reducing efficiency programs, and financial assistance (e.g. grant opportunities or energy use and the financial rebates). In addition, several episodes of Town Talk have covered home resources available to support energy efficiency strategies and incentives. We work closely with CORE those efforts and the EAB on these ongoing educational efforts. In 2012, the Town engaged with community partners and representatives from a front-range geothermal company to explore the opportunity to install ground-source heat pumps beneath the numbered 9. Explore opportunities to lots to reduce heating and cooling needs in Snowmass Village. At the establish shared renewable energy time, this project was determined to be cost prohibitive, however given the data gathered through the MBCx project, this may be a viable option infrastructure in the future. Currently, staff and the EAB are anticipating a proposal from the Snowmass Water & Sanitation District on a potential hydroelectric project in Snowmass Village. 10. Work with Part-Time residents, The Core Energy Smart Program currently does audits and outreach with lodges, and property managers to Part Time owners and property manager, and the EAB will continue to reduce energy use in unoccupied look for additional outreach mechanisms, including utilizing groups such as PTRAB. homes and empty lodge rooms 11. Pursue grants and assist The town has actively pursued grants to fund important energy community members in pursuing efficiency and renewable energy projects, including CORE. We've also grants for renewable energy recently received a Randy Udall grant, and CORE assisted the Town in generation projects and other compiling a list of all available opportunities. efficiency upgrades 12. Track and promote progressive This is primarily done through associations like CAST, and actions are climate legislation at the local, taken when specific legislation is introduced or of impact to the Town. state, and federal levels



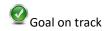


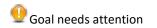


## AFFORDABLE HOUSING AND COMMUNITY SERVING COMMERCIAL

- 1. House as many Snowmass Village employees as want to live within Town Limits
- 2. Build new and update existing affordable housing using energy efficient, green construction practices incorporating renewable energy systems.
- 3. Increase inventory of affordable commercial space and community-serving retail businesses offering basic supplies for residents.

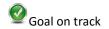
basic supplies for resident	.5.	
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES
1. Pursue seasonal housing partnerships with educational and arts providers, businesses, and non-profits to maximize housing development potential on town land		The Housing Department works closely with the SkiCo—the Town's largest employer—who provides seasonal affordable housing at the Club Commons. Many tenants who decide to become permanent residents after the ski season find themselves looking for permanent housing, and our department offers the next step (sees themselves as an important resource and stepping stone). This is accomplished through education and outreach.  The department also works closely with Community Development to
		evaluate housing mitigation requirements for development, and works with developers as requested.
2. Amend Housing policy to allow cost recovery to affordable housing owners for investment in energy efficiency upgrades		In 2012 Town Council passed a resolution allowing owners of deed- restricted employee housing units to recover the cost of energy efficiency/renewable energy upgrades up to 10% of the home's resale price.
3. Establish standards requiring renewable energy generation, high efficiency systems, and other green building strategies to be incorporated into new affordable housing.		The Housing Department has ensured that energy efficiency and on-site renewable energy are key considerations in affordable housing projects. Rodeo Place for example, the most recent housing project, was constructed to exceed code mandated efficiency standards by a significant margin. Features installed in the homes include energy star rated appliances, compact fluorescent lighting fixtures, and low-flow dual-flush toilets. They are heated by 92 percent efficient boilers with the domestic hot water supply supplemented by a 46,000 BTU solar thermal system. A full description of energy saving features is available in a press release about the development's completion: http://www.tosv.com/civicalerts.aspx?aid=14
		As opposed to creating new standards specific to affordable housing, the department is committed to following the town's forward-thinking green building code to show that the town is practicing what we preach.
4. Develop plan to incorporate renewable energy generation,		The Housing Department tackles improvements to existing housing stock through a three-pronged approach:







## AFFORDABLE HOUSING AND COMMUNITY SERVING COMMERCIAL 1. Apartment checklist: A list of basic energy efficiency improvements green building products, and efficiency upgrades into existing that maintenance professionals are responsible for when a tenant affordable housing stock moves out, before the next tenant moves in. The checklist is available in our 2014 annual report. 2. Small-scale renovations: As our housing stock ages, the housing department is continually searching for cost-effective opportunities largely driven by grants or available capital—to make efficiency upgrades. Recent examples include solar thermal installations on Brush Creek and Villas N. Apartments, window replacements, retrofits with energy star appliances, and boiler upgrades. Through such upgrades, some of our oldest building projects are now the most efficient. 3. Large-scale renovations: A large renovation project is planned for The Creekside Apartment Complex (as presented to the Council in Nov. 2014). Energy efficiency, green building materials, and sustainable design are cornerstones of the project's goals. The approximately \$3 million renovation will include sustainable building materials (like new cladding and stone, fiberglass windows and glazing, and Energy Star entry doors), improved insulation, and upgraded systems, and is expected to net an overall energy savings of 30-35 percent. Both the Housing and Community Development Departments are currently reevaluating the effectiveness of enforcement efforts. While Community Development currently enforces occupancy of ADU's and ECU's, the department is shifting to a carrot vs. stick approach. In an effort to further stimulate local construction on the heels of Ordinance 5. Increase enforcement efforts 4, series of 2013 (which changed the way we calculate floor area), the regarding occupancy of accessory Community Development Department is looking at ways to encourage dwelling units and employee people to use the new floor area freed up by regulations by adding housing units accessory dwelling units to take pressure off of employee housing, help ensure a vibrant workforce, and provide an opportunity to age in place for an aging population that may want to downsize. They will be proposing code amendments for Council to consider in 2015. 6. Explore land trust model and other publicly assisted economic development strategies, as well as regulatory tools available to create This implementation concept has not been actively pursued to date and/or maintain affordable community-serving commercial



space.

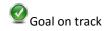


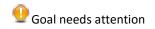


# **LAND USE AND OPEN SPACE**

- 1. Adopt land use regulations promoting development that is consistent with the Town's energy conservation and environmental sustainability goals.
- 2. Preserve quality of existing open space and increase acreage of protected lands.

<ol><li>Preserve quality of existing open space and increase acreage of protected lands.</li></ol>				
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES		
Strengthen development review standards concerning environmental impact analysis and consideration of environmental carrying capacities		The comprehensive plan update in 2010, in a section dedicated to environmental impacts, carrying capacity and environmental impacts was highlighted as a new priority. The Land Use Code also has strong standards relating to these topics.		
2. Clarify and strengthen development code requirements for energy consideration and create specific criteria for Energy Conservation Plans		An energy conservation policy has been established through the Land Use Code and the Building Code. This is how the REOP fee is generated and collected.		
3. Clarify Community Purpose provisions regarding "Sustainable Development" and "Preservation of Open Space."	×	This implementation concept has not been pursued to date. However, Community Development recommends that this warrants future discussion, likely through the next Comprehensive Plan update and next round of Land Use Code Amendments.		
4. Simplify application submittal requirements and create expedited review processes for projects incorporating renewable energy generation systems.		This has been considered but not adopted. Much larger policy decisions makes this a difficult policy.		
5. Identify opportunities to produce food on open space lands (i.e. community garden program) and to incorporate edible landscape components into the built environment (where feasible in ways that are consistent with local wildlife control policies).	<u>(!)</u>	A community garden is available adjacent to the Fire Station/Anderson Ranch. Otherwise, this implementation concept has not been actively pursued to date.		
6. Develop collaborative process to review and make recommendations on new development applications related to sustainable design and construction.	<u>(l)</u>	This is ongoing in practice, however not formalized on paper. The Environmental Advisory Board is included as a key stakeholder in all discussions on new and proposed development (Entryway meetings are one example).		



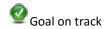


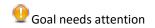


## **WATER**

- 1. Ensure adequate water availability to meet current and future demand, and to serve new development, while maintaining healthy aquatic systems.
- 2. Promote conservation mentality and secure adequate storage facilities to eliminate need for water restrictions.

restrictions.		
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES
1. Amend building code to require low-flow plumbing fixtures in new construction, and provide incentives to encourage retrofits in existing buildings (i.e. low-flow fixture rebate/subsidy program)		This has been accomplished through the green building code
2. Increase the use of grey water systems, ditch water and snowmelt/stormwater recapture systems for irrigation purposes.		The Parks, Recreation, and Trails and Housing Departments have been making great strides to improve water conservation efforts in the Town's irrigation systems. In 2014 Town staff from various departments met with the Snowmass Water & Sanitation District to determine how near and long-term improvements to the Town's irrigation system could coordinate with goals detailed in SWSD's Water Conservation Plan which include—but are not limited to—promoting the use of nonpotable water supplies for irrigation, and improving public outreach on the incentives and programs that are available for both commercial and residential accounts. Ideally, the Town and the District would collaborate on a water conservation/water efficiency pilot project with Town Park irrigation.
3. Verify that building code requirements for plumbing infrastructure are aimed at maximizing both energy efficiency and water conservation—amend as necessary		This has been accomplished through the green building code
4. Replace top-load washers with energy-and water-efficient front-load washers in Town laundry facilities and affordable housing complexes.		This has been accomplished. Town laundry facilities have been fitted with washers that use 12 gallons per load, compared to older units which previously used 28 gallons per load.
5. Amend development code requirements and review criteria to mandate drought tolerant landscaping in new development		This is not currently mandated



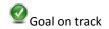


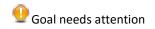


# RESOURCE CONSERVATION, RECYCLING, & SOLID WASTE

- 1. Reduce per capita waste generation and increase use of environmentally friendly consumer products.
- 2. Increase long-term capacity (lifespan) at the Pitkin County landfill.
- 3. Maximize efficiencies in waste collection, hauling, and sorting systems.

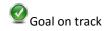
	3. Maximize efficiencies in waste collection, hauling, and sorting systems.				
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES			
1. Reduce office paper use by 20% throughout Town organization		The Town has successfully cut down on paper usage by nearly 30% since 2009. This is mostly attributed to the Town Council's decision to begin utilizing electronic packets and meeting materials in 2012.			
a. Promote use of TOSV website and other electronic means to distribute information		Since 2012, the Town has taken many steps to improve electronic communications and promote town engagement online. This includes the launch of tosv.com which provides a user-friendly platform for digital town-services including:  - The Public Records Portal (powered by Laserfiche)  - Electronic bill-pay  - Electronic budgets  - Town forms (including job applications, rental applications, etc.)  - News and announcements (e-newsletter, press releases)  - Engagement tools: Community Voice discussion forum, and Request Tracker  - Platform for Granicus (for management of Council Agendas and video archives)  - Automatic notifications via email or text message  In following years, gosnowmass.com was launched by Snowmass Tourism as a premier platform for tourism news and information (events, activities, and business listings). Snowmasstransit.com went live in April, 2014 to promote access and information regarding the Village Shuttle, and ways to get around Snowmass Village without a personal vehicle, and finally Parks, Recreation and Trails launched snowmass recreation.com promoting the departments facilities and programs.			
b. Install monitors and/or 'smart boards' in conference rooms		Monitors have been purchased and installed in several meeting spaces, but there are still improvements that could be made to make this equipment easier to use and a better alternative to printing presentation materials.			
c. Require double-sided printing capability in all new printer purchases, and implement reuse of paper already printed on one side for 'fax' and draft print jobs.		This has been accomplished. Any documents that are printed one-sided and not used are placed in bins next to the printer so that they can be reused on the backside.			

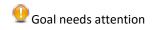


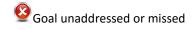




RESOURCE CONSERVATION, RECYCLING, & SOLID WASTE				
d. Transition document archiving from paper based to electronic format.		This has been accomplished through LaserFiche		
e. Convert to paperless Council packet, newsletter and payroll systems.		This has been accomplished. Packets are published using Granicus and to the Town's website, and accessible to Council members on ipads. The Town's newsletter is distributed using tosv.com. Finally, with the Finance Department's transition to New World, payroll and HR and benefit information are all handled electronically.		
f. Develop electronic building permit application	(1)	In progress. Community Development is evaluating which software package is most appropriate (both New World and CivicPlus, the provider of the Town's website have systems that could suit this need).		
2. Establish bulk purchasing program to address cost barriers to purchasing more environmentally friendly products used through the Town organization (i.e. non-toxic cleaners, recycled paper products, etc.)		This has been discussed for special events (i.e. keeping a stock of commonly used compostable materials for vendors) however there has been no progress. Currently, there are no product restrictions for Special Event Producers, which the EAB views as a necessary first step for a policy like this one to be needed.		
3. Establish Town procurement policy requiring the use of products containing recycled materials when available.	×	There is currently no policy in place, but it is anticipated this topic will be discussed during an evaluation of the Town's special event applications and procurement procedures.		
4. Establish design criteria for trash, recycling, and composting facilities in new development.	1	In progress. Public Works and Community Development are evaluating what would be appropriate to include in a development review process.		
5. Amend land-use application submittal requirements to include all information in electronic format and minimize the number of printed copies available.	1	In progress (see Implementation Concept 1. F)		
6. Increase enforcement and fines for littering and unauthorized use of trash facilities	1	Illegal dumping of dangerous materials or using illegal facilities is consistently enforced and fined by the Police Department. Littering is a less frequent offense dealt with by the PD, but there is currently a fine in place for offenders. This is a comparable fine with other communities, and it may not be necessary to increase.		
7. Improve waste collection systems to minimize overall number of pick-ups, maximize hauling efficiency, reduce		This is in progress largely due to the transition to single-stream recycling (which went into effect in spring, 2014) and an the recently completed IGA with the Pitkin County Landfill. The Public Works Department has also budgeted for new equipment that supports single stream.		

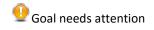


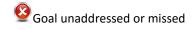




RESOURCE CONSERVATION	N, RECY	CLING, & SOLID WASTE
recycling contamination, and maximize recycling program participation.		Efforts continue to expand local outreach/education on the components of a successful recycling program in Snowmass Village. The most recent examples include a Grassroots TV Town Talk episode which aired winter 2014/2015, and at the Free Concert Series during the summer of 2015.
8. Expand local and regional recycling facilities to accommodate a wider assortment of recyclable materials (i.e. chipboard, #5 plastics, electronics, etc.)		This has been accomplished through the transition to single stream recycling, which expanded items accepted in recycling bins to include chipboard (cereal and beer boxes), office paper, magazines, phone books, and milk and juice cartons. This is in addition to plastics (number one through seven), cardboard, paperboard, glass food and drink containers, metal cans, aluminum, magazines, paper bags, and paperback books. Electronics recycling is available at the Town's Public Works shop.
9. Provide trash and recycling containers at all Town parks, buildings, and public gathering spaces.	<u>(l)</u>	Anecdotally, this has been accomplished however the Public Works department is currently conducting a formal audit at all town facilities to ensure the right receptacles are in place, and signage reflects recent changes with the single-stream program.
10. Expand composting capabilities to accommodate commercial food waste as well as household and yard waste.		Composting not currently a part of the Town's solid waste portfolio.
11. Adopt a recycling ordinance requiring diversion of construction and demolition waste, and participation in the Town's recycling program for all commercial operations and special events.		Although no ordinance is in place, the Town's EAB has been working with event producers to make sure recycling is an event priority. Examples include the Recycling Ambassador program, and working with the Rodeo to make sure recycling bins are available. In the future, green policies may be adopted through the new special event permitting process.
12. Create incentives for participation in the Town's recycling program.	(I)	The Town's EAB has recently launched their recycling ambassador program. Local businesses that adopt Town events and promote recycling are thanked in return through publicity and advertising. However, additional incentive programs for private residents should be developed through solid waste policies and pricing
13. Adopt green special event criteria aimed at reducing consumption while maximize recycling and composting of waste.		This has been accomplished through the green events program, which is currently a voluntary program. It should be considered as to whether or not this program should become mandatory.
14. Use recycled asphalt whenever possible to establish roadway subgrade base courses.		This is a key consideration of the Road Division, and also extends to shoulder materials.
15. Test use of recycled and alternative paving materials in	(I)	This is in progress and led by Public Works and the Road Division.

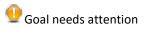


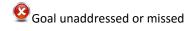




RESOURCE CONSERVATION, RECYCLING, & SOLID WASTE				
new Town sidewalk and roadway surface specifications.				
16. Develop partnerships to incentivize waste reduction (i.e. participation in reusable bag challenge)	<u>(l)</u>	EAB plans to create incentive programs in 2016		
17. Improve household hazardous waste collection system.	<u>(1)</u>	No steps to date have been taken to increase collections of hazardous waste.		







## **GREEN BUILDING**

- 1. Increase energy efficiency and the use of renewable energy in new and existing construction.
- 2. Adopt regulations requiring sustainable design and the use of green building materials in new construction.

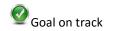
construction.		
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES
Establish an expedited review process and discounted fee structure for renewable energy generation projects and for efficiency enhancing retrofits	<u>[]</u>	This will be considered during a broader Community Development effort to review potential amendments to the Town's Land Use Code.
2. Adopt a comprehensive "Green Building Code" for both new construction and renovations to existing buildings requiring:		In 2013 the Town became one of the first municipalities in Colo. to adopt the 2012 International Green Construction Code with amendments for commercial buildings, and the 2012 International Energy Conservation Code for both residential and commercial buildings.
a. High-performance energy efficient design: Building envelope, lighting, windows, mechanical equipment		
b. On-site renewable energy generation in new development		The 2012 IGCC addresses the sustainability of an entire commercial building project and its site and promotes the conservation of water, materials, energy, and building systems. The 2012 IECC sets minimum energy efficiency provisions for both residential and commercial buildings. Users of the code can choose between two methods for showing compliance, the prescriptive and performance paths.
c. Third-party system commissioning		
d. Use of green building materials with consideration given to embodied energy, renewable resources, recycled material content, chemical off-gassing, place of origin, etc.		These codes are available on the Town's website at www.tosv.com/codecentral
e. Incorporation of direct digital controls and other energy load management technology		
f. Water-conserving plumbing fixtures		

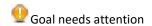






#### **GREEN BUILDING** 3. Develop and distribute an While the Town does share sustainable building resources on information guide to green tosy.com, the development of a guide has not been deemed a cost building products, energy efficient effective project considering how quickly technologies and 'best design, and construction practices. practices' change. 4. Incorporate energy usage standards into Town's Lighting The Community Development Department feels this is important and Ordinance to discourage use of should be taken up at a later date. incandescent and other higher consumption technologies 5. Develop economic and other incentives for new construction The Community Development Department feels this is important and and renovation projects to exceed should be taken up at a later date. the minimum energy efficiency standards. Through our membership and partnership with CORE, the Town is 6. Work with new and existing involved in promoting and educating residents and business owners on commercial lodging and residential the incentives available including energy audits, grant programs, loan properties to encourage and interest loan programs, and rebates for energy saving upgrades. Video, incentivize green operating and advertising, public relations, email outreach, and additional maintenance plans including: communications techniques have all been leveraged to inform the community of these opportunities. a. Appliance maintenance programs In the future, a deepened partnership with CORE could expand such b. Use of energy-efficient light incentive programs with Town support (for example a specific rebate bulbs program targeted at businesses, employee housing, and private housing funded by REOP and other sources). c. Electrostatic furnace ignition vs. pilot lights In addition, the town's environmental award, initiated in 2013, recognizes organizations or businesses located or operating in the Village that have made a commitment to improving the natural d. Occupancy-based control environment through policies, programs, or actions. The goal is that systems on snowmelt and other this recognition can help incentivize businesses that are serving as building systems local environmental leaders, and motivate others to follow suit. Full details on the annual award are available at www.tosv.com/environmentalaward e. Timers, moisture and temperature sensors on snowmelt systems f. Programmable thermostats

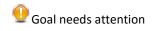






GREEN BUILDING	
7. Conduct energy audits and thermal imaging on all Townowned buildings.	This has been accomplished through the MBCx program.
8. Develop a purchasing policy requiring purchases of highefficiency equipment and appliances that allow for more sustainable operations within TOSV organization (i.e. Energy Star appliances, double-sided printers, low-flow fixtures, etc.)	There is currently no policy.
9. Develop standard design specifications requiring all new Town buildings to be LEED certified, or to provide DOE certification indicating achievement of equivalent energy efficiency standards.	Any new town buildings would be requirement to meet the adopted green building code, and therefore would meet these standards.
10. Require third-party commissioning on all new Town-owned buildings.	Accomplished through the MBCx program and will be a practice in the future.
11. Develop standard specifications for retro-commissioning and retrofitting existing Town buildings with energy efficiency upgrades including fixture, appliance, systems, and building shell improvements.	This has been accomplished through the Town's capital replacement project in conjunction with MBCx implementation recommendations, to be presented to Council in winter or spring, 2015.
12. Continue to develop and implement efficient building standards and a renewable energy offset program to curb impacts of inefficient building design and outdoor energy use.	The REOP program is being implemented as the program intended. If the Council wishes to expand the program the EAB, CORE, and Town Staff can develop a proposal for Council's consideration.







## **MOBILITY AND TRANSPORTATION**

## 2009 Category Goal:

1. Develop an integrated mobility strategy that minimizes single occupancy vehicle trips by providing attractive, safe and convenient transportation alternatives.

attractive, sare and conve	ment transp	T T
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES
1. Adopt land use regulations that encourage transit-oriented development and maximize multinodal connectivity between development clusters	<u>[]</u>	Unaware of formal land use regulations in place, but this is something Community Development emphasizes through plan review processes
2. Develop a comprehensive and strategic transportation plan that addresses relationships and tradeoffs among single-occupancy vehicle use, the provision of parking infrastructure, and public and private transit services.	<u>[]</u>	This will be part of the Town's larger Capital Improvement Program development, which is included in Council's draft goals/strategic plan for 2015/2016.
3. Expand winter trail maintenance to promote year round walkability		In 2013 the Town added a full-time year round Parks & Trails Manager to oversee trail maintenance and long-term parks and trail development strategy. This has led to a higher level of maintenance on all town-owned trails (and strengthened partnerships related to maintenance on non-town-owned trails).
4. Increase the number of pedestrian and bike trail access points throughout the Village.		This item was recently included in Council's goals, and it remains a priority of Town staff to evaluate and improve pedestrian/bike trail connectivity around town.  This is one important element of a long-term expansion of our trail system (and that of the entire upper roaring fork valley's integrated trail system). The Town's continued participation in the Upper Roaring Fork Valley Trails Plan helps identify necessary areas of focus and expansion.  Specifically, over the past two years three important trail connections projects have improved trail access and user safety. These include the North Rim trail extension (improving access from the Nature Trail), South Rim Trail extension (improving access from Rodeo Place/Horse Ranch), and a connection to improve access from the Tom Blake Trailhead to the parking area.
5. Integrate future trail planning with existing transit infrastructure to enhance the safety and quality of pedestrian connections throughout the Village, especially along Brush Creek Rd., and close to high-use commercial and high density residential development.		The Town, following the adoption of Council's top goals, has recently issued an RFP to evaluate the overall connectivity of the Town. This will create a plan for further consideration.

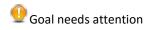


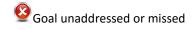




MOBILITY AND TRANSPORTATION				
6. Foster development of a centralized shuttle system to provide airport transportation to replace redundant and inefficient use of independent property airport shuttles.	<u>[]</u>	The Snowmass Village lodging community is represented by the Snowmass Lodging Association who consistently seeks opportunities for collaboration, communication, and efficiency. While we are unaware of a formal program, we do know that they have worked together well to provide a successful shuttle program.		
7. Continue free bus service throughout Snowmass Village and between Snowmass Village and Aspen.		The Town, SkiCo, and the EOTC continues to support this free service.		
8. Maintain convenient and consistent fixed-route transit service to high-density residential neighborhoods and commercial nodes (including the SV Recreation Center), while utilizing 'dial-a-ride' service (and/or expanded private service provider partnerships) to serve single-family and outlying neighborhoods.		The Transportation department is consistently evaluating the right mix of service for users to maximize ridership and efficiency.		
9. Encourage higher degree of regional integration among public transit, aviation, and highway transportation management strategies.		Although this happens on a case by case basis, there hasn't been any steps taken to encourage integration. Unclear what this goal was in 2009.		
10. Continue to prioritize and incentivize use of public transit and park & ride for Town sponsored special events and commuters.		The formation of the special events committee in 2013 helps facilitate internal communications planning events, and determining levels of service necessary to support special events.		
		The Town has also expanded their outreach and education to event attendees encouraging the use of public transportation.  Snowmasstransit.com and event promotional materials for example provide event specific tips and schedules.		
11. Engage in Pitkin County Airport planning process to promote transit connection enhancements		The Pitkin County Airport is currently engaged in a multi-year planning process, in which Town staff is directly involved.		



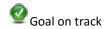


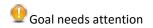


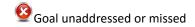
# **WATERSHED WATER QUALITY**

- 1. Minimize negative impacts to watershed water quality.
- 2. Improve water quality in Brush Creek to eliminate its Roaring Fork Conservancy designation as an "Impacted" waterway.

impacted waterway.	ı	
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES
1. Update the Town's Greenway Master Plan to better understand current riparian ecosystems health, sediment loads, biological diversity, etc.	<u>(l)</u>	This was incorporated into the Town's comprehensive plan in 2010. Also, a stormwater and sewer analysis was included in the Town's budget for 2016. This is within the new CIP, and the study will be taking place in the near future. The final study will be used for the comprehensive plan update.
2. Regulate use of magnesium chloride and other chemical ice melts and dust suppressants within the Town.	<u>(i)</u>	In progress. The Town does not use magnesium chloride, but we also don't regulate its use by other parties, such as other construction companies that conduct Right of Way work. The Public Works department is constantly evaluating alternative methods.
3. Develop standards for creek water quality testing protocols in partnership with the Roaring Fork Conservancy.		No formal standards have been adopted by the Town
4. Implement wetland restoration and expansion projects and promote the use of permeable paving and bio-swales to allow natural filtering and minimize sheet-flow of stormwater run off	<u>(l)</u>	No wetland related projects are currently underway, but storm water mitigation is a constant priority for Public Works. Filters have been installed and are designed to mitigate the impacts of storm water runoff in our wetlands.
5. Expand annual clean-up efforts and explore other methods to limit siltation impacts associated with sanding of Town roadways		This is actively implemented on Town roads and shoulders by the Town's Road Division.
6. Find opportunities to re-use or recycle contaminated 3/8" chip that is picked up from ditches and stream beds each spring.		See above
7. Examine water quality impacts associated with livestock intensive activities and operations (i.e. Rodeo Grounds, Krabloonik)		This could be a consideration during lease negotiations, if applicable, but this study has not taken place.







# **WATERSHED WATER QUALITY**

8. Work with Water and Sanitation District to gain understanding of Town-wide stormwater and sanitary sewer infrastructure heath

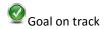


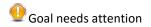
This has been accomplished as part of the state water conservation plan.

9. Improve domestic pet pick-up enforcement and scoop bag availability



Pet pick up is routinely enforced, but more efficient procedures could be put in place to patrol and enforce parks/trail rules. Scoop bags have been installed and are readily available at most parks and trailheads.



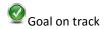


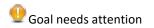


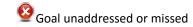
# **AIR QUALITY**

- 1. Minimize airborne dust and other pollutants, including building and vehicle emissions.
- 2. Stay within allowable Pm 1 0 levels at all times.

2. Stay within allowable Pm 1 0 levels at all times.				
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES		
Require use of biodegradable, non- chemical dust suppressants on construction sites and service roads	<u>[]</u>	This is not currently enforced. Through the Town's Construction Mitigation Plan, however, development projects are required to mitigate dust. No requirements are in place for biodegradable materials, but water is the most common material used for this mitigation activity.		
Post signs and enforce adopted vehicle idling regulations	×	No signs posted regarding idling.		
3. Train town staff to recognize violations of and enforce air pollution standards	×	No formal training has taken place.		
4. Conduct minimum amount of fixed-route street sweeper operations along with on-demand response, as necessary to minimize roadway dirt and dust		We are currently doing regularly scheduled street sweeping maintenance as well as on demand sweeping services for special events or requests.		

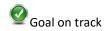


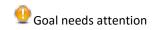


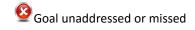


# WILDLIFE HABITAT & PHYSICAL ENVIRONMENT

<ol> <li>Minimize negative impacts to wildlife habitat and migration corridors.</li> </ol>				
IMPLEMENTATION CONCEPTS	STATUS	PROGRESS/NOTES		
Strengthen code regulations regarding excessive noise, and train staff to recognize violations and enforce them		No formal training has taken place, but Town staff are knowledgeable in handling noise complaints and directing them to the correct officer(s). No additional code regulations have been implemented beyond what is "excessive."		
2. Strengthen code regulations regarding impacts to wildlife and protection of wildlife habitat		The availability of an Animal Services unit within the police department has expanded our ability to educate, enforce, and evaluate our wildlife policies. Animal services have stepped up enforcement for illegal trail users, and has recently received a lot of publicity for their use of trail cameras to identify illegal trail users. This enforcement allows us to keep certain habitats protected for wildlife.		
3. Examine benefits to wildlife, recreational quality and public safety associated with limiting or banning hunting within Town limits.		This evaluation has not taken place		
4. Increase educational, outreach and enforcement efforts regarding trash regulations		Animal services produces a lot of educational materials regarding wildlife ordinances, such as magnets on dumpsters, outreach campaigns, and informational websites.  Animal services also meets with special event vendors to explain wildlife ordinances.		
5. Pursue grant opportunities related to environmental and wildlife education, outreach and signage	<u>[]</u>	No grants pursued, but educational signage has been posted where applicable.		
6. Develop and distribute informational resources regarding wildlife issues, especially during migration and calving periods		During sensitive periods, Animal services steps up educational efforts and enforcement.		
7. Work with the US Forest service to develop a pre-emptive pine beetle strategy	×	This strategy has not been developed		
8. Continue to implement the Town's 10-year weed management program.		Noxious weeds are consistently treated through the Town's Parks and Recreation department and the Public Works department. Every year, through a private contractor, noxious weeds are treated along the Town's public streets and trails.		







## WILDLIFE HABITAT & PHYSICAL ENVIRONMENT

9. Develop improved strategies for weed abatement on private property

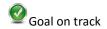


No program in place at this point. A lot of education materials are produced by Pitkin County open space, however, and we plan on continuing to utilize these resources.

10. Preserve and expand wetland habitat where feasible



This will be a part of the upcoming entryway and cozy point master plans that the Town will be involved in. These are upcoming opportunities to make this goal a priority of the Town.







#### **NEXT STEPS AND RECOMMENDATIONS**

After reviewing this plan, the Town's sustainability goals, and the progress made within each category, the EAB would recommend the following next steps to Town Council:

- 1. Re-evaluate Top Priorities The EAB would recommend re-evaluating the Town's Sustainability Plan. While most of the initiatives contained in the plan on ongoing, several others have been completed or are no longer applicable. The EAB would recommend going through a similar process to the 2009 evaluation to ensure the main goals and priorities listed in the Sustainability Plan are still in alignment with Town Council views. This should be done before the update to the Comprehensive plan, or in conjunction with it.
- **2. Increase the Town's CORE dues to \$10,000** The EAB fully supports CORE's request from the Town to increase their dues to the organization from \$5,000 to \$10,000 (see attached memo).
- 3. Update the Town of Snowmass Village Carbon Emission Inventory New technology and industry standards make this practice more reliable and useful than ever. Other jurisdictions in the region update their carbon emission inventory regularly, and the data collected is used to measure performance. An updated inventory for Snowmass Village could serve as an effective baseline and performance measure for the future of the community.
- **4. Approve Request for REOP funds and move forward with MBCx project** The design of the MBCx project is included within the 2016 budget and is proposed to be funded via the REOP fund. The EAB strongly supports this project.
- **5. Continue to evaluate and move forward with Renewable Energy Projects** The Town should be a leader in renewable energy, and innovative projects that advance local renewable energy production and/or research should be explored.
- 6. Include specific action items, from the sustainability plan, for the upcoming renewal of the Comprehensive Plan The Town should make sure that environmental sustainability is a major component of the comprehensive plan for the community.
- 7. Review the Land Use Code, and make necessary amendments to continue to promote efficient planning and building design Some of the greatest accomplishments in energy efficiency take place through regulatory bodies. The Town of Snowmass Village should ensure their Land Use Code is in alignment with their environmental values.
- 8. Implement new "green" special event requirements The EAB implemented a voluntary Recycling Ambassador program in 2015, which was very successful. However, it became clear that working with event producers ahead of the event could make these recycling efforts even more successful. The EAB recommends that the Town implements the following requirements within their special event application process:
  - Set a Town-wide goal for green events (such as striving for Net-Zero waste events)
  - Establish a mandatory set of green event criteria that considers other event rules and regulations (such as wildlife regulations), sets a list of approved products and processes, and requires a plan to be submitted detailing how event organizers plan to meet criteria.
  - o Provide consistency with neighboring municipalities like the City of Aspen.

