Sustaining Reliable Prosperity:
Profiles of Northwest Mining Towns, Past and Present

Wendy R. McClure
Professor Emeritus, University of Idaho

In the case of mining towns and cities of the Old West, sustainability, whether economic, cultural, or ecological, could be considered an oxymoron. Founded in the spirit of taking rather than making, late Nineteenth and early Twentieth century placer mining towns were volatile and environmentally destructive, amplifying challenges concerning their survival. The mountainous regions of the western United States are littered with remnants of former mining communities and their polluted landscapes. Those mining cities that sustained the initial boom and bust cycle of placer mining operations and the exploitive behaviors of fortune seekers, exhibit similar capacities; most developed lode mining operations, which spanned 80 -100 years, afforded gainful employment; mining populations built permanent and distinctive residential and commercial neighborhoods within the confines of challenging geographies and fragile ecosystems; place attachment was strong; extractive resources eventually played out creating a need for adaptation; and environmental degradation and pollution was pervasive. In their contemporary state, former mining communities continue to present inherent challenges to the goals of achieving long term sustainability culturally, economically, and ecologically. Their stories, past and present, can provide insight for contemporary generations of community builders as they pursue strategies to revitalize and adapt inherited historic contexts for new west economies and contemporary culture. Discussion will profile a spectrum of former mining towns in the Northwest's mountainous regions.

"Reliable Prosperity" during the mining era - Overview

According to Ecotrust's model for "reliable prosperity," communities achieve a sustainable state by maintaining healthy eco-systems, affording social equity, and developing an economy that does not compromise capacity for future generations to meet their needs. How would mining towns have measured up historically against Ecotrust's model for reliable prosperity? (www.reliableprosperity.net)

Economic sustainability. Throughout the intermountain west, gold strikes attracted the first wave of settlers in the form of placer miners between 1863 and 1878, generating the earliest stages of town development. Placer miners were migratory by nature and generally focused on taking rather than place-making. Parasitic businesses including saloon keepers, prostitutes, and gamblers followed on the heels of stampeding prospectors, hoping to siphon a portion of their daily bounty. In an 1867 report, The Secretary of the Treasury acknowledged the inadequacies of the placer mining as an economic force to steward sustainable town-making. Most intermountain mining cities can attribute their initial formation to placer mining. Sustainability, once placer claims played out, depended upon finding alternative sources for long term economic development. In many cases, deeper discoveries manifested in corporate lode mining, which employed hundreds of workers and operations that sustained for nearly a century.

Social/cultural sustainability. A community's capacity for economic diversification, in turn, depended upon building social capital in the form of an industrious people who remained after placer mining played out. According to late Nineteenth century observers, an invested citizenry of community builders were needed who "could enable solid steady growth and development of resources leading to the advancement of a country and the enobling of its people." (Howe, p. 115) In most cases, mining towns achieved long term economic and social sustainability if and when they could develop lode mining operations to attract immigrant mining populations in search of steady work, a permanent home, and supporting businesses. Achieving "reliable prosperity" in the Nineteenth century west also depended upon securing access to railroad shipping routes. Towns supported by promising lode mining operations provided powerful economic incentives for railroad companies as they decided where to locate their transcontinental lines.

Ecological sustainability. Mining towns historically developed unique, dynamic, and often unsustainable relationships with their supporting landscapes. On-going processes of extraction beneath, surrounding, and within developing human settlements, generated an ever changing landscape. In extreme cases, the relationship between town and its supporting landscape was cannibalistic as expanding extractive processes actually consumed neighborhoods. Mining operations, by the very nature of their extractive purpose, altered landscapes. By-products, whether in the form of excavations, piles of tailings, altered streambeds, machinery, or pollution are not readily erased. Natural landscapes remained scarred and transformed by exploitive human intervention. From the onset, mining communities faced serious challenges concerning environmental sustainability. Processes of ore extraction disturbed natural systems, permanently altered landscapes, generated polluting byproducts, and eventually depleted non-renewable resources. During the Nineteenth century, most mining communities did not focus on processes for remediation. Their community planning decisions either served to mitigate damage to areas inhabited by humans and wildlife, or to exacerbate it. (McClure, 2013)

"Reliable Prosperity" during the mining era - Overview

Virginia City: a virtual ghost town. Virginia City's short lived boom and precipitous decline echoes the story of ghost towns throughout the west's failed gold mining regions. In 1863, gold deposits along a 14-mile section of Alder Gulch attracted over ten thousand placer miners from other gold rush territories in the western US. Within a few days of the rush, prospectors, seeking order amidst chaos, empowered the Verona Town Company to plat 320 acres as a town site. Virginia City, claiming to be the largest settlement in the Rocky Mountains, served as the social and commercial hub for regional mining camps.

Initial prosperity positioned the town as the territorial capital of Montana from 1865-1875. A detailed plan of Virginia City featuring gridded streets and a Georgian style capitol building was created by civil engineer JL Corbett "by order of the city council" in 1868, in anticipation of becoming Montana's state capitol. Virginia City ultimately failed in its bid to become the new state's capitol and the plan was never realized. Instead, Virginia City's population plummeted in the 1870s to less than 800 when more promising strikes siphoned off prospectors to other parts of Montana. (Van West, 1986) (Fig.1) Very little development occurred in Virginia City after 1900, indicating the town's inability to cultivate "reliable prosperity." (Van West, 1986)

Butte, Montana: a global copper metropolis. Butte, Montana, originally founded as a gold rush settlement in 1864, hovered on the threshold of extinction until silver and copper deposits were discovered in 1876. The town was subsequently re-platted in a grid configuration on the slopes of a steeply rising, south-facing hill replete with copper. (Reps, 1979) Discovery of rich copper reserves throughout the hillside under and above Butte attracted a steady influx of hard rock miners, setting the stage for Butte to become the world's leading copper producer and a new city of the Industrial Revolution.

An 1884 birds-eye rendering captures the intensity with which urbanization occurred in Butte and the unmistakable source of economic growth residing in close proximity beneath its urbanizing surface. A network of head frames used to support vertical lifts in underground mining operations provided an industrial crown for the crest of "the richest hill on earth." Smokestacks - the skyscrapers of industrialization - emanating from smelters are depicted pervasively, serving as a billboard for Butte's prominence in the economy of an industrializing western landscape. (Fig. 2)

The seemingly limitless supplies of copper and other metals in Butte fueled corporate mining operations for more than a century. Immigrants from over 38 countries flocked to Butte to work in the mines. The combined influences of mining operations, geographic conditions, and ethnic backgrounds helped to shape both the distribution and segregation of neighborhoods. In spite of pollution hazards, most neighborhoods were located in close proximity to mine entrances to lessen miner's exposure to Butte's frigid temperatures as they returned home after work shifts. The most marginalized populations were housed on the east side of town in the path of prevailing winds, which carried smoke from reduction plants and smelters. (Gibson 2009)

Early residents maintained a love-hate relationship with the industrial city's gritty, hard-edged character. Writer Mary Maclane described the marred, treeless landscape and polluted air as "the near perfection of ugliness....Pitiable,
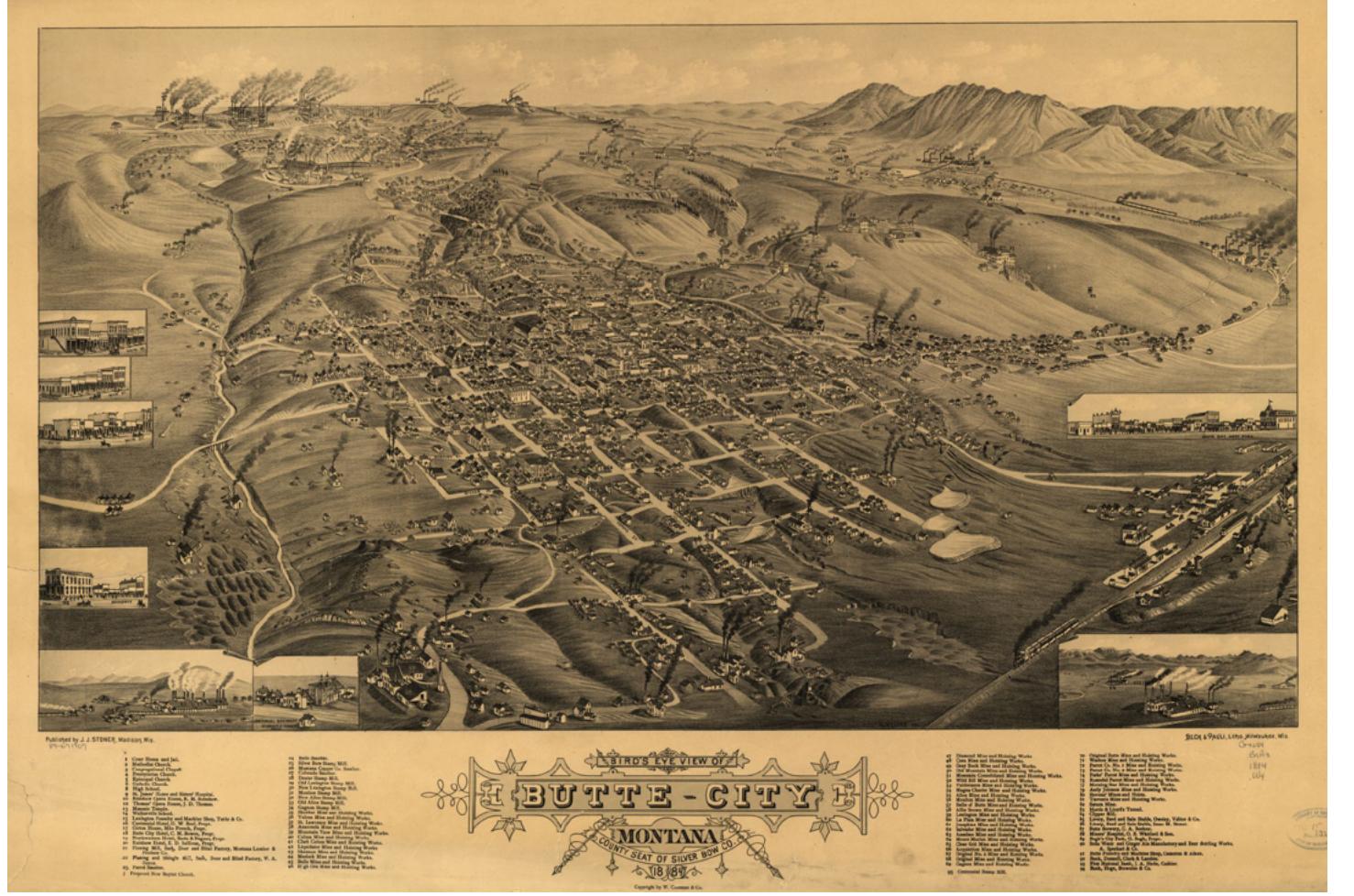
Figure 1

Bird's eye view of Butte-City, Montana, county seat of Silver Bow Co., 1884
https://www.loc.gov/resource/g4254b.pm004530

barren, contemptible, damnable, nothingness. But there is love for me in this Butte…the stone streets full of houses and persons…the little mines in unexpected mid-town blocks with their engines and hoists and scaffolds and green coppery dumps." (Gibson p. 149). The Happy Traveler's Club, which authored travelogues for the Northern Pacific Railroad, optimistically nicknamed Butte and its hillside of steel headframes, the Paris of mining towns." (Howe p. 122)

Butte's population declined in tandem with a gradual decline in the demand for copper following World War I. Depletion of high quality ore precipitated closure of underground mines in the 1950s. The Anaconda Company replaced underground mining with strip mining operations as a means to sustain itself and local employment. Between 1950 and 1980, as much as 50,000 tons of rock per day was removed from the Butte Hill. The social and environmental consequences of strip mining were monumental; entire ethnic neighborhoods, including Nineteenth century houses, churches, and commercial buildings, were literally swallowed up and city water sources became contaminated. The Berkeley Pit as the largest of Butte's strip mines, reached a perimeter size of 1 x 1.5 miles and a depth of 1800 feet. Described as "an inverted monument to human labor," the Berkeley Pit encroached steadily westward towards the core of uptown Butte, threatening to subsume it as well. (Van West, 1986)

Throughout the 1960s and early 1970s, the Anaconda Company purchased fringes of uptown and demolished historic buildings in order to maintain a buffer between mining operations and neighborhoods. In anticipation that the uptown business district would also be sacrificed, property owners neglected their properties, fell delinquent on taxes, or relocated to the sprawling valley, further precipitating erosion of the once bustling town center. Property values plummeted. Arsonists attempted to accelerate the destruction, many hoping to collect insurance money. In the 1970s, the Anaconda Mining Company proposed that the city relocate its business district to "the flats" and engaged Rouse Co. Developers to design a new town commercial center in the corporate fashion of Columbia, Maryland. In 1976, their relocation proposal was put to a vote by city council and defeated by a single vote, sparing uptown Butte. (Gibson, 2009)
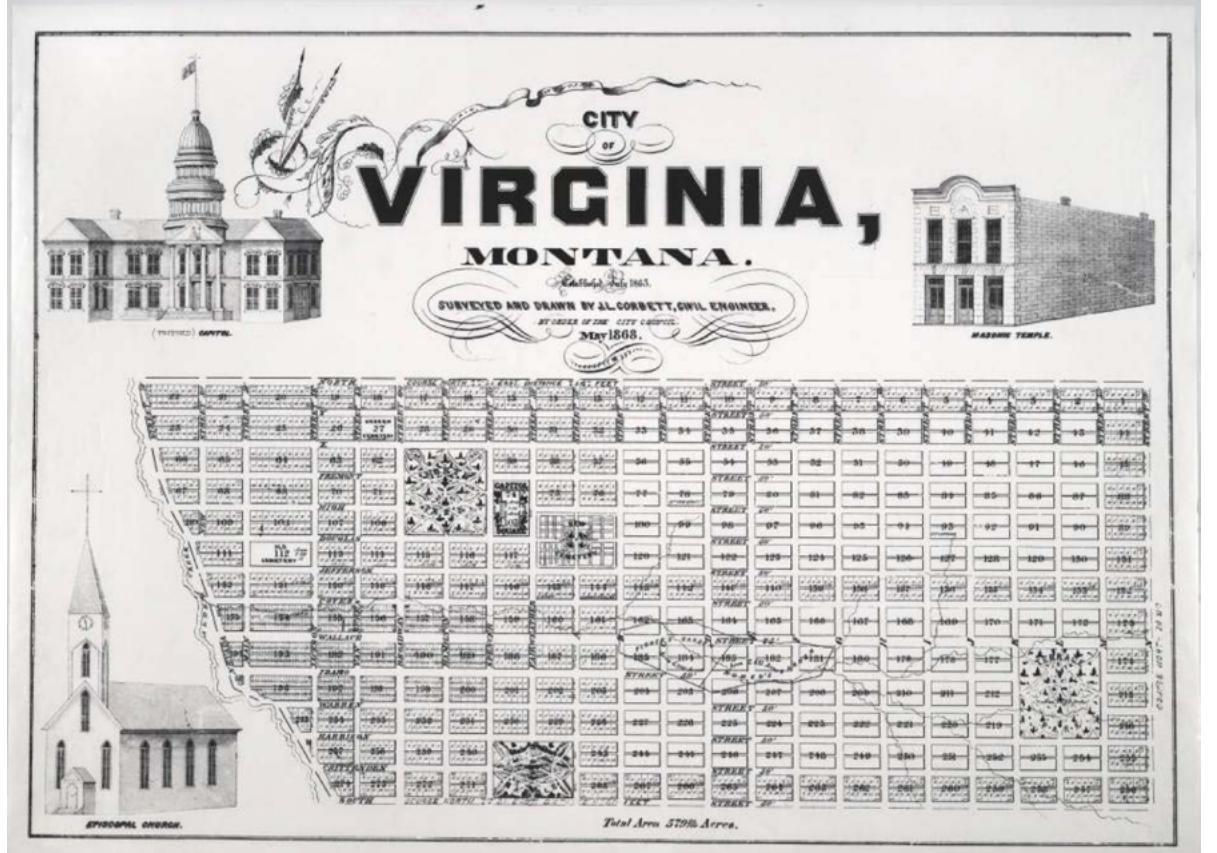
Figure 2

City of Virginia, Montana, established July 1863
http://mtmemory.org/cdm/singleitem/collection/p15018coll5/id/13/rec/58

From the outset, reliable prosperity in Butte was compromised by the unbridled environmental consequences of mining. Historically, city government made decisions that would best profit mining interests and provide jobs for its substantial mining population, sacrificing the city's culturally rich, humanly-created environment and supporting natural landscapes. Economic pursuit transformed and inverted the natural landscape, creating barren surfaces incapable of supporting ecological systems. A barren landscape serves as a perpetual reminder. Additionally, closure of mining operations in 1982 created unforeseen environmental consequences. The Berkeley pit and underground mines began filling with water, generating one of the biggest challenges for environmental clean-up in US history. The polluted landscape remains as a major health hazard and impediment as the community seeks to attract new industries to employ its underutilized workforce. (Gibson, 2009) (Fig. 3)

Wallace and Kellogg, Idaho: a Silver Legacy. Gold strikes in the Coeur d'Alene Mountains initially led to the formation of tent cities and small settlements in Idaho's Silver Valley along the Coeur d'Alene River and its tributaries. While towns located outside of the valley's central spine were abandoned when resources played out, Wallace and Kellogg prospered for several reasons; both towns were centrally located along the Coeur d'Alene River; the railroads constructed direct linkages between them and urban marketplaces; and the Silver Valley's most productive mines, which included the Bunker Hill complex, Sullivan Mines, and Sunshine mines, were within Kellogg's city limits and in close proximity to Wallace. Economic stability resulting from highly productive corporate mining, enabled multiple generations of miners and their families to tap deep roots and local businesses, both legitimate and illicit, to prosper.

The capacity to achieve "reliable prosperity" in social dimensions throughout their 100-year mining history is captured in their expansive cultural narrative in song and literature. Wallace's iconic commercial district heralds the will and aspirations of previous generations of community builders as they rebuilt from the catastrophic 1889 fire and continued building fine architecture well into the 1930s. By contrast, the cumulative environmental toll resulting from 100 years of mining, was catastrophic; toxic emissions from smelters denuded hillsides; lead-laden tailings contaminated soils in communities; and hundreds of millions of tons of hazardous waste was dumped into the Coeur d'Alene River. Downstream effects contaminated the river basin, bordering wetlands, Lake Coeur d'Alene, and the Spokane River. Toxic smelter emissions contaminated soils and caused unprecedented lead levels in resident children. In 1983, the Environmental Protection

Agency designated 21 square miles of the Silver Valley, which included both towns, as the largest Superfund Cleanup site in history. High lead levels and other hazardous pollutants continue to pose a downstream threat to human health, wildlife, and plant ecosystems to this day. (www. wallace-id. com/history.html)

Both communities persevered through the 1893 national economic crisis- floods- catastrophic fires - including the complete devastation of Wallace's commercial district in 1889 and the Big Burn of 1910 - and periods of violent union strikes. They reached peak populations in 1960 in tandem with a robust national silver market. Their populations declined throughout the 1970s in tandem with silver prices. In 1981, the largest mining company, the Bunker Hill, shuttered operations leaving both communities in economic distress. (Hart and Nelson, 1984) (www.lib.uidaho.edu/special-collections/Manuscripts/mg367.htm)(sspa.boisestate.edu/idaho/exhibitions-tours/idaho-issues-online/cities/kellogg-redefined/)

"Reliable Prosperity" during the mining era - Overview

Today, former mining communities persist in a variety of forms including virtual ghost towns, places that have been preserved by neglect, skillfully adapted for contemporary uses, or transformed by unbridled development. Each representative case study town reflects philosophical differences regarding treatment of its cultural resources. Discussion about differences in sample communities, including attitudes, approaches, and policies, follows.

Virginia City: a living museum. Virginia City persists, frozen in time, as a living museum. The town's preservation can largely be attributed to the private efforts of Montana ranchers, Charles and Sue Bovey, who purchased and restored a majority of the remaining buildings, including prime examples of Victorian-era territorial architecture. (Van West, 1986) In the 1990s, the Virginia City Preservation Alliance helped facilitate the town's purchase by the state of Montana and currently curates the town as a living museum and tourist attraction. Virginia City's contemporary state illustrates the community's failure during the Nineteenth Century to sustain as a living community by cultivating reliable prosperity in social and economic dimensions. The surrounding landscape, which was altered by Nineteenth Century mining operations, continues to communicate irreversible transformation of the area's natural geography and polluting impacts on supporting ecosystems.

Butte, Montana: preservation by neglect. Although Butte was designated as a national historic landmark shortly after the national program's inception in 1961, the community was slower to realize the value of its mining heritage as manifested in historic buildings and neighborhoods. Butte City council's decision to turn down The Anaconda Company's plan to

Figure 3

The Berkeley Pit located at the eastern edge of uptown Butte

demolish the urban core marked a turning point. Beginning in 1977, the city adopted historic preservation and revitalization of uptown as its official policy; the community began to view Butte's historic buildings as assets instead of liabilities and to recognize their potential to stimulate economic development. (Quivic, 2009)

Today, six square miles of uptown Butte are designated as a national landmark, positioning the city as a destination for cultural tourism. The city became proactive about historic preservation in 2007, by adopting a comprehensive preservation ordinance that establishes a local register for historic properties. Accompanying design guidelines empower the county historic preservation commission to review publically funded rehabilitation projects and all proposed demolitions of historic structures. Local preservationists and the urban renewal agency prepared attractive financing packages to encourage developers to purchase and rehabilitate foreclosed buildings. In spite of these incentives, historic buildings throughout uptown and residential neighborhoods await a new economic purpose. (Gibson, 2009) (Fig. 4)

Place attachment remains strong in Butte. Multiple generations live in close proximity to one another. While the community retains strong cultural ties to the mining era and a remarkable inventory of mining era architecture, continuing environmental challenges cast doubt concerning the city's ability to attract growth and to re-purpose its historic core.

Idaho's Silver Valley: *Kellogg and Wallace*

Kellogg: a theme town and downhill skiing destination. In an effort to overcome high unemployment and the stigma of being designated as an EPA superfund site, the Kellogg

Figure 4

Uptown Butte's Inherited Mining Era Architecture

community sought new avenues to restore reliable prosperity by becoming a destination for outdoor recreation. First, the community taxed itself and acquired federal funds to expand and upgrade its local ski area by constructing a gondola leading directly from town. Local decision makers abandoned its authentic mining town identity by adopting a theme town approach to economic revitalization. Hoping to match the economic success of Leavenworth, Washington, a Bavarian theme town in the Cascades, Kellogg instituted development guidelines during the 1990s. The guidelines called for Bavarian detailing to be applied to the facades of mining era buildings, new commercial development, and signage throughout town. The newly adopted community identity was a mismatch for its deeply rooted mining heritage. Ultimately, a ten-year effort to market the Bavarian image failed. In 2005, the city initiated a second misguided, but short-lived, attempt to recast the former mining community as an "alpine resort." Guidelines recommended that storefronts be reconstructed using heavy timbers. In recent years, some mining era buildings have been appropriately restored and adapted for contemporary uses in the uptown area. European style mixed development at the gondola base seeks to regenerate a form of active public space that once characterized uptown Kellogg. Recently constructed single family housing appropriately reflects the mining era's scale and simplicity. (sspa.boisestate.edu/idaho/exhibitions-tours/idaho-issues-online/cities/kellogg-redefined/) (Fig. 5)

Wallace. Downtown Wallace, which served as the Silver Valley's commercial heart, was largely constructed between 1889 and 1920. The picturesque downtown features a substantial inventory of late Victorian-era commercial buildings. Interstate 90 was originally routed directly down Main Street. During the 1970s, the Federal Highway Administration's plan

Figure 5

Uptown Kellogg's ill-fated Bavarian style make-over

for improvements to the I-90 corridor called for demolishing the entire mining era commercial district. Local citizens and decision makers rallied to protect their cultural heritage by seeking designation of the iconic downtown as a National Historic District. Ultimately, the will of the community prevailed and national register designation forced the FHA to alter their plans; the interstate was elevated to by-pass the downtown, sparing Wallace's cultural heart. Today, local citizens and business owners view inherited resources as a source of community pride and cultivate heritage tourism as an economic development opportunity. (Fig. 6)

Conclusion

Mining era townscapes in the mountainous Northwest persist in varying degrees of clarity, their contemporary state determined, in part, by the quality of balance between social, economic, and environmental priorities achieved by former generations of community builders. As evidenced by historic profiles, mining communities faced significant challenges to their sustainability; their economies were founded on non-renewable resources, their natural landscapes were continuously subjected to damaging and polluting practices, and long term thinking was compromised by transient fortune seekers and speculators. In the face of these challenges, deeply rooted mining cultures built places worth caring about.

Current generations face new challenges as they pursue avenues for reliable prosperity; processes for environmental remediation are on-going, economic opportunities are needed to reverse steady declines in population, sprawl threatens to replace mining as the primary agent of land consumption, and historic resources are in need of community stewardship and investment. How can community builders in former mining

cities such as Butte, Kellogg, and Wallace achieve a more sustainable state in the future? Their collective histories reveal important considerations as follows:

1) Economic endeavors that negatively impact human health and ecosystems, upon which communities depend, are not sustainable

2) Social well-being and long term economic prosperity depend upon maintaining healthy ecosystems

3) Mining cultures with an invested citizenry built distinctive and memorable places; they set the bar for new generations of community builders

4) A plan for economic development should be founded on authentic place-identity, cultural integrity and stewardship of inherited architectural resources.

5) Community memory and place-identity are sustained through stewardship of its architecture and neighborhoods

A community's collective sense of self, today and in the future, is also critical to a more sustainable future. The inevitable growth and change that accompanies economic development should be guided by regulating plans and preservation policies that appropriately define and protect authentic community character, encourage adaptive use of inherited fabric and quality integration with contemporary development. A successful quest for reliable prosperity will depend on it.

Figure 6

Historic preservation in downtown Wallace, Idaho sustains authentic mining era identity

References:

Gibson, R. (2009) "Butte, 1950-2009: Decline Loss and the Rise of Historic Preservation and Cultural Tourism" Vernacular Architecture Forum 2009: Butte and Southwest Montana Field Guide of 30th Annual Meeting (Vernacular Architecture Forum (VAF).

Gibson, R. (2009) "Southeast Tour: Pony, Virginia City and Twin Bridges" Vernacular Architecture Forum 2009: Butte and Southwest Montana Field Guide of 30th Annual Meeting (VAF).

Hart, P. and I. Nelson. (1984). *Mining Town: The Photographic record of T.N. Barnard and Nellie Stockbridge from the Coeur d' Alenes*, (University of Washington Press and Idaho State Historical Society).

Hibbard, Don. "Wallace Historic District." 1972. National Register of Historic Places Registration Form, United States Department of Interior, Washington DC. Accessed 01 October, 2015. <http://history.idaho.gov/sites/default/files/uploads/Wallace_Historic_District_79000809.pdf >.

Howe, R. (1897). *The Great Northern Country Chronicles of the Happy Travelers Club*, (Passenger Department of GNRR and NSCO).

Knight, Oliver. (1973). "Towards an understanding of the Western Town", *Western Historical Quarterly,* IV pp. 27-42 .

McClure, W., "Sustaining place-identity in historic mining cities of the US Rocky Mountain West." *International Journal of Design & Nature and Ecodynmaics*, 8(4), pp. 287-299, 2013.

Murphy, M. (2009) "Excerpts from Copper Metropolis" Vernacular Architecture Forum 2009: Butte and Southwest Montana Field Guide of 30th Annual Meeting (Vernacular Architecture Forum).

Quiviv, F. (2009) "Mining Industry Foundations for the Built Environment of Butte and Anaconda" Vernacular Architecture Forum 2009: Butte and Southwest Montana Field Guide of 30th Annual Meeting (VAF Montana).

Reps, J. (1979) *Cities of the American West: A History of Frontier Urban Planning* (Princeton University Press).

Reps J. (1981) *The Forgotten Frontier: Urban Planning and the American West* (University of Missouri Press).

Travis, W. (2007) *New Geographies of the American West: Land Use and the Changing Patterns of Place* (Island Press, Washington).

Van West, C. (1986) *A Traveler's Companion to Montana History* (Montana Historical Society Press).

Websites:

http://www.americanheritage.com/articles/magazine/ah/1997

http://www.idahomining.org/history.html

http://www.reliableprosperity.net

http://www.lib.uidaho.edu/special-collections/Manuscripts/mg367.htm

http://sspa.boisestate.edu/idaho/exhibitions-tours/idaho-issues-online/cities/kellogg-redefined/

http://wallace-id.com/history.html