

# Nature and Culture at the Confluence: Interpreting Milltown

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INTERPRETIVE STRATEGIES PLAN

MAY 2012



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## 1. Preface

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Main Street Design is pleased to submit to the Missoula Historic Preservation Office this *Interpretive Strategies Plan* for the sites and communities at the confluence of the Blackfoot and Clark Fork Rivers in Missoula County, Montana. This is an unusual, ambitious and innovative initiative focused on a truly unique place – both environmentally and culturally – endowed with remarkable resources and stories. We are honored to be able to contribute.

In early 2012 the Missoula Historic Preservation Office engaged Main Street Design to provide interpretive planning services for the confluence site as part of the ongoing remediation, restoration and redevelopment efforts following the removal of the two dams and the contaminated sediments that had accumulated at the bottom of the Milltown Reservoir, on the Clark Fork River upstream of the Milltown dam. The proposed interpretive planning exercise was intended to be consistent with the objectives outlined in the Bonner Dam memorandum of Agreement between the U.S. Fish and Wildlife Service and the Montana State Historic Preservation Office, and the Milltown Dam Memorandum of Understanding between the Environmental Protection Agency and Missoula County. To support those objectives, this plan establishes a flexible framework for the preservation, documentation, and public interpretation of the natural history and cultural heritage of the confluence before, during, and after the removal of the dams and cleanup of the site.

A critical part of the planning process centered on achieving consensus around proposed interpretive goals and objectives, themes, strategies and methodologies, possible initiatives, and implementation priorities among a diverse group of project stakeholders. Toward that end, the Missoula Historic Preservation Office formed a project steering committee composed of members of the public represented by the Milltown Superfund Redevelopment Working Group and representatives of the Historic Preservation Office; the Missoula City – County Health Department; Montana Fish, Wildlife & Parks; and the Salish - Pend d'Oreille Culture Committee of the Confederated Salish and Kootenai Tribes. The steering committee was deeply and actively involved in the planning process and played an essential role in shaping its outcomes. We are grateful to them for their generous commitment of time and energy, and for their many creative contributions.

This interpretive planning effort was conceived in part to help guide the appropriate disposition of cultural mitigation funds held by Missoula County in the Historic Preservation Trust Account for the

Milltown Dam and Milltown Superfund site, including proposed interpretive experiences to be located at the new Milltown State Park. The planning brief from Missoula County also specifically directed Main Street Design to consider a broad range of possible interpretive initiatives and priorities not restricted to the State Park site or limited to the potential implementation funding now held in the Trust Account. With that in mind, as planning proceeded we explored both site-based and off-site, community focused initiatives and we considered priorities for the public presentation of interpretive resources as well as the continuing acquisition, documentation, and preservation of those resources – intangible and tangible alike.

The duration of the planning process for this project was relatively compressed, but it was intensive and highly focused and involved active public engagement at every step along the way, including outreach to stakeholders and open public meetings. We believe that the outcomes provide Missoula County with effective mechanisms for shaping the interpretation of the confluence. These are stories of local, regional, and national significance. Moving forward, as the environment of the confluence continues to heal and evolve into an ecologically healthy and productive resource; and as the citizens of the County and other visitors, in particular the Flathead Nation peoples reoccupy the site and restore traditional cultural and recreational relationships while developing new ones; we hope that this *Interpretive Strategies Plan* will serve as a useful tool for interpretive planning, priority-setting, and decision-making.

Thank you.

Main Street Design, Inc.

May 2012

## 2. Project Overview: Movement, Connection, and Place

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The initial RFQ for *Nature and Culture at the Confluence: Interpreting Milltown* states succinctly, “The confluence of the Big Blackfoot and Clark Fork Rivers is both physical and symbolic, and interpreting this site and its meanings is as much about what is there as what is now not there.” This is unarguably true, but only hints at the challenges, complexities, and opportunities involved in developing interpretive strategies for this remarkable place.

From Late Cretaceous period, some 70 to 100 million years ago when ancient tectonic forces created the massive Lewis and Clark Fault line that runs straight through the Clark Fork Valley, through the formation and sudden catastrophic breaching of Glacial Lake Missoula, and on up to the present day, the confluence has been the site of extraordinary events. Wild creatures from spawning trout to migrating waterfowl have long followed routes through these streams and valleys. For untold millennia native peoples relied on the rivers and their flood-plains for sustenance and transportation, traveling in and alongside the waterways and occupying seasonal camps at specific places bearing



ancient names, to harvest fish, game, and wild plants. Early Euro-American explorers, trappers and traders followed the same routes and often occupied the same campsites as they pushed the new nation’s frontiers westward during the late 18th and early 19th Centuries. Some of the newcomers developed good relationships with the native peoples, even as the overall effect of the invasion was the displacement of the indigenous inhabitants, the taking of their lands and resources, and the transformation of the cultural world that had shaped the region from time immemorial.

As the eastern half of the United States developed and grew, demand for natural resources from the American west increased exponentially.



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Logging and mining proliferated across western Montana, forever altering the natural patterns and cultural characteristics of the region. Native peoples were forced into conflict with Euro-American immigrants, and with one another. Traditional patterns of hunting and gathering and spiritual practice were disrupted. Even more dramatically, at least as far as the story of the confluence is concerned, mining and smelting operations in Butte and Anaconda, 100 miles upstream, required enormous quantities of timber, which were cut by loggers in the virgin forests north of the confluence and floated downstream, in vast log drives, on the Blackfoot.



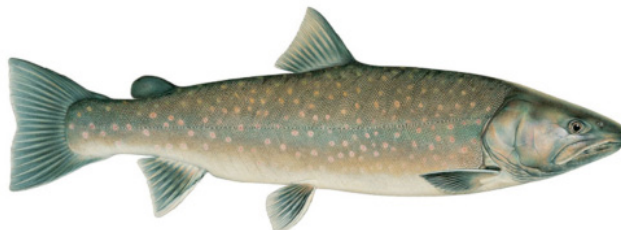
The first permanent sawmill built at the confluence of the Blackfoot and Clark Fork Rivers opened in 1886, powered by a dam across the Blackfoot which also served to hold the logs that had been driven down the river. The mill expanded rapidly and within two decades was joined by another facility and another larger dam – this one across the Clark Fork. The sawmills supplied timbers to the mining industry, and the mines, in turn, sent something considerably less desirable downstream: toxic pollutants produced during copper mining and smelting processes. In June of 1908, not long after the Milltown Dam was completed, a record spring flood deposited tons of contaminated sediments behind the new dam, where they lay undisturbed and continuing to accumulate for the next one hundred years.

The construction of the Milltown and Bonner Dams effectively destroyed the two streams' bull trout spawning runs, eliminating a food resource that native peoples had depended on for generations and disrupting centuries-old spiritual traditions. The effects of the toxic sediment deposits were well-documented even in the nineteenth century (for example, in the vivid reports of Barton Evermann for the US Fish Commission). Throughout the twentieth century, milling

operations persisted at the confluence, producing significant economic development, supporting the growth of Missoula County and increasing the cultural and ethnic diversity of the region as immigrants from many different backgrounds came to work in the mills – and to play in and around the reservoir, notwithstanding the dangers that lurked beneath, unseen and largely unconsidered.

The mills' fortunes waxed and waned over the years. Ownership changed hands several times. Big copper's (and big timber's) iron grip on western Montana loosened slightly in the second half of the 20th century. Although the mines no longer required a steady supply of heavy timbers, other demand for wood products exploded in the second half of the twentieth century, leading to unsustainable clear-cutting on many of the public lands in the Northern Rockies. Throughout that time the mills remained a vital economic and social force in the County, and especially in the communities that had grown up at the confluence, directly adjacent. The mills, and Milltown Reservoir, remained sources of pain and symbols of loss for many Indian people, but most Montanans did not regard them as controversial. They were simply signs of progress, inevitable facts of life.

In 1981, not quite a hundred years after the first permanent dam was built at the confluence, a routine test of drinking water wells in Milltown yielded highly elevated levels of arsenic and heavy metals. Further testing revealed that the source of the contaminants was the toxic sediments lining the bottom of the reservoir, which had infiltrated the surrounding aquifer and eventually made its way into residential wells. The wells were closed; alternative sources of drinking water were provided for the community; and the Environmental Protection Agency added the confluence to the National Priorities List for cleanup and remediation of pollution – the program popularly known as "Superfund." Ultimately, the confluence and its upstream tributaries became part of the largest Superfund site in the U.S.



A PARTIAL BONNER MILLTOWN TIMELINE

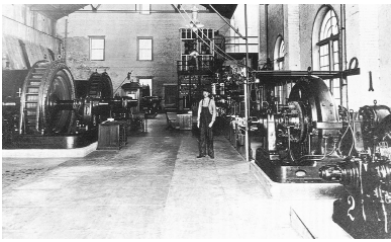


- 8-11,000 years BPE: Continuous occupancy and use by indigenous peoples
- July 4, 1806: Meriwether Lewis and nine men from the Lewis and Clark Corps of Discovery ride on horseback through the Bonner area from Missoula on their way up the Blackfoot.
- July 2-3, 1860: Captain John Mullan crosses Blackfoot in first trip to construct Mullan Road from Fort Walla Walla to Fort Benton. He writes: "There were no difficulties for wagons to get in and out of the river; the depth of the water was two feet in the channel."
- 1861 - 1862: Captain John Mullan establishes winter camp, called Cantonment Wright, near mouth of Blackfoot, during his second sweep along the Mullan Road. Builds 235-foot bridge with four spans; establishes four additional camps up the Hell Gate (Clark Fork); makes mountain side cuts to avoid ten river crossings.
- 1863: German-born Daniel Bandmann makes first appearance on an American stage as an English-speaking Hamlet, at Niblo's Garden in New York City. Twenty five years later, Bandmann "retired" to a ranch near Bonner, an area now known as Bandmann Flats.
- 1874: C.P. Higgins and brother own Blackfoot bridge and charge toll to cross it.
- August 19, 1881: During construction of Northern Pacific Railroad across Montana, NP awards lumber contract to Eddy, Hammond and Co., owned in part by E. L. Bonner, to build line from Garrison Junction to Thompson Falls. Mills were immediately built at Clinton and Bonita.
- August 1, 1882: Montana Improvement Company formed by Andrew Hammond, Richard Eddy, E.L. Bonner, M.J. Connell, Marcus Daly and Washington Dunn. The Company was separate from Eddy, Hammond and Co.; set up to exploit timber available from NP land grant, some 14 million acres in Montana alone.
- 1880s: Hiram Farr claims land and water rights at future site of Bonner mill.
- 1880s: Andy Vote homesteads on Bandmann Flats. Sells option to Jacob Rehder in 1886, who sells to Daniel Bandmann in 1888.



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- 1883: Northern Pacific railroad is built through Bonner Milltown. Crosses Clark Fork at present Bandmann Bridge, then recrosses in Pine Grove near present home of Bob and Phyllis Heyer. Blackfoot bridge for NP built where Highway 200 bridge stands today.
- May 1884: Montana Improvement Company buys land for future dam and mill from Hiram Farr, reportedly for \$100 and a cow.
- September 1884: Montana Improvement Company announces plans to build a dam to hold logs one-half mile above the confluence of the Blackfoot and Clark Fork. Dam is completed by November under direction of Robert Coombs (who later built the first tavern and saloon at Bonner and operated it for many years; known as the Bonner House.)
- 1884: Zaugg family travels by train from Missouri to settle in West Riverside. John Richlie had previously immigrated to the area, thought it promising, and sent for his wife, Adelia, and her family – mother-in-law Barbara Zaugg and Barbara’s other children Celia, Martha, Emma, Emil and 12-year-old Arnold. Arnold was only Zaugg born in America. Original home built near where Lions Club barn is today. John and Adelia later moved to DeSmet area, and Zauggs proved up on the homestead, which included all of present-day West Riverside from the Blackfoot River to Pine Grove.
- Spring 1885: Flood washes out most of the dam on the lower Blackfoot.
- 1885: Dam and most of sawmill plant at Bonner completed.
- October 1885: Secretary of Interior files criminal and civil suits against Montana Improvement Company for cutting timber on public and private lands as well as railroad sections.
- 1885 - 1886: Logging camp established in Blackfoot country, 25 miles upstream on the south bank of the river at Fish Creek. About 50 men employed. Reached by way of Wallace (Clinton), up Wallace gulch, over top and into Camas Prairie (Potomac Valley), crossed low ridge between Union and Elk creeks and into Sunset prairie where camp was located. Oversupply of oxen after NP railroad completed, no longer needed to freight goods along the Mullan military trail.
- Spring 1886: First log drive down the Blackfoot, nearly 20 million board feet of logs. First bateau constructed by Henry Farrell and Fred Thibodeau, both immigrants from the Maine woods. 46’ long

from stern to bow. Farrell, with a crew of five, rowed and poled it upstream to the logging camp. Thibodeau became operator of the trimmer in the first mill in 1886, stayed there for more than 50 years.

- 1886: Bonner acquires additional half section of land from NP, including land on west side of Blackfoot for \$580.
- June 6, 1886: First log sawed at Bonner (Hammond) mill.
- July 1886: Bonner mill completed. Henry Hammond first general manager. George Hammond had charge of logging.
- 1886: First eight houses built in Bonner.
- 1886: Jacob Rehder buys out homestead of Andy Vote on Bandmann Flats. Plants MacIntosh apples, perhaps first in western Montana.
- November 2, 1886: First election of Bonner precinct held at the mill. 50 votes cast.
- 1887: Blackfoot Milling Company incorporated, taking over the assets of the Montana Improvement Company, which was still embroiled in the government suits.
- April 1, 1887: Bonner's first birth reported, a daughter to Mr. and Mrs. Charles Rouleau at Bonner, Montana Territory.
- April 15, 1887: Missoulia reports, "Brick will be in demand this year, and Mr. Hancock, who is running the Marshall Grade saw mill and brick yard, contemplates burning a million." Andrew Hammond has built a brick kiln on leased land on Marshall Grade, to provide bricks to build the Florence Hotel, the Eddy Building, and the First National Bank in Missoula.
- 1887: Planing mill added to lumber mill. Housed two machines. Samuel Chappell superintendent.
- 1888: Blackfoot Milling and Manufacturing Company succeeds the Blackfoot Milling Company. It later becomes Big Blackfoot Milling Co. (November, 1891), Big Blackfoot Lumber Co. (Nov. 9, 1909), Anaconda Copper Mining Co. (May 26, 1910), The Anaconda Company, Lumber Department (June 18, 1955), Anaconda Forest Products (Oct. 1, 1961), Champion International (June 26, 1972) and Stimson Lumber (1994).
- 1888: Road built up the Blackfoot from Bonner and the town of

Bonner began to take form.

- 1888: Sash and door factory added to the plant.
- 1888: Daniel Bandmann, a German-born Shakespearian tragedian, retires to ranch on Bandmann Flats bought from Jacob Rehder. Rehearses plays and recitations on the top floor of remodeled livery stable. The same year, Bandmann plays dual role of Dr. Jekyll and Mr. Hyde at both the Amphion Academy in New York and Opera Comique in London, based on Robert Louis Stevenson novel published two years earlier.
- March 1888: First Bonner post office established. Lane E. Paskell postmaster.
- June 1888: Henry Hammond becomes postmaster, serves until July, 1899.
- 1888: Dam at Bonner mill begins producing electrical power.

[Compiled by Kim Briggeman, with information drawn primarily from *A Grass Roots Tribute: The Story of Bonner*, Montana (1976, reprinted 2008)]



Having conclusively identified the source of the problem, the County and its citizens – along with the State and Federal governments and the private-sector owners of the mines, smelters, mills, and dams who had been named by the courts as responsible parties – had to decide how to respond. More than a decade of contentious negotiations ensued, fueled both by debate about who would bear responsibility for the enormous potential cost of the clean-up and by scientific and technological uncertainty about what constituted “best practices” in this situation. Some experts and interested parties argued forcefully that the dam should remain in place and the sediments be left undisturbed. Others felt equally strongly that the dams should be dismantled and the polluted sediments removed. A few elected leaders, such as Missoula County Commissioner Michael Kennedy, took the risk of being early advocates of removal of the dam as the safest and wisest course of action

In the February of 1996 another natural disaster brought matters to a head. Eighty-eight years after the great flood of 1908 had initially deposited tons of heavy metals behind the Milltown Dam, a massive ice jam on the Blackfoot churned up the bottom of the reservoir and



drew the toxins into the water column. A significant fish kill resulted, and decision-makers concluded that leaving the dams and the sediments in place posed a greater risk to human and environmental health than taking them away. The long, scientifically challenging, technologically complex, and ultimately uncertain process of removal, remediation, restoration, and redevelopment began. It would be another ten years before the Milltown Dam was fully demolished and the rivers ran free again.

Against this backdrop, as legal and political debate continued apace, the EPA and Missoula County agreed “to work together cooperatively... to generally preserve historically and culturally significant resources at the Milltown site and mitigate any damage to those resources.” The Milltown Redevelopment Working Group was formed, with a History and Culture Committee specifically charged with collecting and safeguarding the rich cultural heritage and natural history of the confluence. Vital partnerships were formed with the Confederated Salish and Kootenai Tribes and with Montana State Parks, among others. Even as the dams were being destroyed, something new and vital was being built.

The confluence is a place of movement, threaded through with rivers and streams; historic trails and pathways; roads, highways, and railroads; wildlife migration routes – even geological faults. It is a place of connection, where native peoples made first contact with Euro-Americans; where immigrants met and mingled; where the demand for natural resources intersected with the resources themselves; and where the sediment-rich waters of the Blackfoot mingle with the slower flowing Clark Fork. It is a unique and individual place with its own particular history and stories, history that is still being made, and stories that deserve to be told.

### 3. Interpretive Planning Parameters

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Any interpretive planning process should be shaped and guided by a consensus among the planning team about certain assumptions and understandings that provide a context for the plan – a set of agreed-upon benchmarks that can be used to evaluate the relative value and importance of potential ideas or initiatives. The following planning parameters emerged as a critical conceptual framework for *Nature and Culture at the Confluence*.

#### PAST, PRESENT, FUTURE

*Nature and Culture at the Confluence* will interpret the diverse stories of this unique place across a full temporal spectrum, from the geological history of the Lewis and Clark Fault and Glacial Lake Missoula to the present day and beyond. As the land heals and both wildlife and humans return to the confluence, the unfolding stories of its future will be as important and meaningful as its past.



#### COMMUNITY AND SITE-BASED INITIATIVES

*Nature and Culture at the Confluence* will support ongoing community history and cultural heritage programs extending throughout Missoula County and beyond, to the Flathead Nation. In the future, it will also feature destination activities and experiences located at the confluence, in and around the new Milltown State Park.





**VARIED STRATEGIES AND METHODOLOGIES**

*Nature and Culture at the Confluence* will embrace a variety of interpretive initiatives ranging from traditional signage and graphics and interpreted walks and talks to interactive citizen science projects, interpretive play experiences, web-based media and personal digital devices, and even theatrical productions.



**DIVERSE TARGET AUDIENCES**

*Nature and Culture at the Confluence* will specifically address and appeal to a variety of potential audiences, including children and adults, residents and visitors, educators, artists and scientists, people who have direct personal ties to the confluence and its history as well as those who do not, and recreational users of the rivers.



**LOCAL CAPABILITY AND CAPACITY-BUILDING**

*Nature and Culture at the Confluence* will specifically seek out and support initiatives that utilize local or regional resources and capabilities, and that can help to develop or expand those capabilities.



**INCREMENTAL IMPLEMENTATION**

*Nature and Culture at the Confluence* will be planned and designed to be implemented in phases, on an ongoing basis and in a non-linear sequence, so as to be as responsive as possible to the availability of funding sources and community support.



#### 4. Interpretive Themes

Interpretive themes are established to define the overall focus of an interpretive experience or installation. The process of developing and refining interpretive themes helps project planners determine the critical content and most important ideas of the sites or subjects to be interpreted, and the relationships among those things. In the future, after the plan has been completed and adopted, interpretive themes serve as a resource for interpreters and educators in the development of new exhibits, activities, or programs.

The goal throughout is to provide a clear and compelling set of experiences for users and visitors, one which is sufficiently varied and diversified to engage different audiences with different interests and levels of experience, and one which addresses all of the key content points of a project individually but in an appropriately interrelated fashion.

The interpretive themes described below are grouped into three categories: the project's overarching theme, its primary themes, and its secondary themes. These categories are conceived of as being "nested," that is, the overarching theme is intended to capture all of the various ideas and information expressed in the primary themes, and the primary themes contain the secondary themes. (Secondary themes may relate to more than one primary theme, but they must be linked to at least one primary theme to be included in the project.)

A project's interpretive thematic framework should serve as a resource, not a constraint. It should be sufficiently flexible and nuanced to enable interpreters and educators to accommodate a rich range of content options while still ensuring clarity and consistency of message.

##### OVERARCHING INTERPRETIVE THEME

###### *Confluence: A Coming Together of Moving Things*

The confluence of the Blackfoot and Clark Fork Rivers is a place of convergence, both natural and cultural, and every aspect of its interpretation should express that core idea.

Everything that comes together in the confluence is moving – from geological formations to rivers and streams; from economic and political forces to people of many different backgrounds; from wildlife to lumber, coal and grain – and the coming together of these moving things, their interaction and interrelationships specific to this particular place, is what gives the confluence its unique identity.



**PRIMARY INTERPRETIVE THEMES**



*Change Over Time*

Nothing in nature or culture is static. Everything is dynamic, always evolving, always changing, and the confluence offers a powerful case study. From the Lewis and Clark Fault and Glacial Lake Missoula all the way to the ongoing natural and cultural restoration of the rivers and floodplains and their neighboring communities, we will interpret the evidence and impacts of change over time.



*Interconnection*

The confluence is rich with connections between people and places, between natural and economic forces and systems, and between past and present. From bull trout spawning and moving upstream to how the demand for resources shaped the development of Western Montana, we will explore crucial causal relationships that inform the character of this place.



*Movement*

The confluence is a place of movement, of people and goods and wildlife and natural forces. Shifting tectonic plates formed the Missoula Basin. Streams and rivers sculpted the Clark Fork Valley. Game trails, seasonal hunting and gathering routes, wagon tracks, roads and highways, all create constant motion. And with the removal of the dams, ancient patterns of movement are being renewed.



*Human and Natural Health*

People have always looked to the rivers for sustenance and health, harvesting fish from their waters and game and plants along their banks. As industries grew we began to ignore the health of the rivers themselves, with terrible consequences. Concerns about human health at the confluence led to a commitment to restore the environmental health of this place, which in turn creates new access to healthful recreation.

**SECONDARY INTERPRETIVE THEMES**



*Restoring the Confluence*

The Milltown Dam site is at the forefront of emerging science and technology: the rehabilitation of industrially polluted environments, and in particular, the restoration of rivers and watersheds. What happens here will have resonance around the country and the world. Interpretation will document the history and impacts of this work, from the demolition of the dams to ongoing, hands-on re-vegetation with native plants.

(Key primary theme links: Change Over Time, Human and Natural Health)



*Industrial Systems and Resources*

The health and environmental damage to the confluence was caused by industrial processes: mining and smelting; timber harvesting and milling. But industrial systems and resources are also essential to the restoration, remediation, and redevelopment of the region. Interpretation will help visitors understand these systems and their impacts, past, present, and future.

(Key primary theme links: Change Over Time, Interconnection)



*Biological Systems and Resources*

For thousands of years the confluence has been the site of complex ecosystem interactions, and interactions between biological systems and resources and human activities. Interpretation will identify and explain key natural constituents of this site – pieces, parts, and processes – and will highlight both their effects on humans and our impacts on them.

(Key primary theme links: Change Over Time, Movement, Interconnection, Human and Natural Health)



*People of the Confluence*

From time immemorial, people have come to the confluence. It has been a place of both connection and conflict, where the different interests and perspectives of many cultures have met and interacted. Interpretation will profile all of the people of the confluence and explore their relationships with each other and with this place.

(Key primary theme links: Movement, Interconnection)



*Evolving and Enduring Values*

The cultural history of the confluence is a story of both enduring and changing human values and perspectives on nature and natural resources. This is illustrated by specific, tangible evidence of our interactions with this place, from the removal of the dams (evidence of changing Euro-American values) to newly planted native grasses, forbs and shrubs (enduring values of native peoples) and sinker logs emerging from the Blackfoot near the mill site. Interpretation will call our attention to what has changed about the confluence and what remains consistent, enhancing our appreciation and understanding of this particular place.

(Key primary theme links: Change Over Time, Interconnection, Human and Natural Health)



## 5. Community Interpretive Initiatives

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The proposed interpretive initiatives outlined below reflect the conviction of the *Nature and Culture at the Confluence* steering committee that Milltown’s interpretation should not only inform citizens and visitors, but should actively engage them, in an ongoing manner, with the evolving stories of this place. The initiatives are not presented in any particular order of importance or priority (although some are clearly better positioned than others for short term implementation) and are intended as a menu of possible projects, not a proscriptive list. There are certainly other potential options worthy of consideration. Which Community Interpretive Initiatives are implemented, and in what sequence, will depend on the ability of project proponents to secure the necessary human and financial resources.

### *Work in Progress: Citizen Science Initiatives*

The presence in Missoula of the University of Montana, along with numerous environmentally focused non-profit organizations, provides a robust resource base for ongoing “citizen science” projects aimed at engaging schools, civic groups and others in monitoring and documenting the restoration and remediation of the confluence.



*Students at all different grade levels, community groups and civic organizations, and interested individuals can all engage in field research activities, providing valuable data while gaining new skills and experience.*

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### *Story Saving, Story Sharing: Ongoing Community History Research*

The rich cultural heritage of the confluence is currently being preserved and disseminated through a variety of independent initiatives, ranging from the work of the Confederated Salish and Kootenai Tribes and the Bonner Milltown History Center to the University archives. *Nature and Culture at the Confluence* should actively support, extend, and seek to integrate these activities.



*Documenting the recollections and perspectives of different cultural groups will create a rich and informative interpretive resource.*

### *Virtual Confluence Web-Based Gathering Place*

Building on the solid foundation and well-designed interface already established for the <[www.tworivershistory.net](http://www.tworivershistory.net)> website, *Nature and Culture at the Confluence* should maintain and expand its presence on the internet, serving as a reliable source of information, an active hub for dialogue and discussion and a “digital commons” linking diverse community organizations and initiatives.



*A Moveable Feast: Personal Mobile Digital Devices*

Taking advantage of the content databases being accumulated by various stakeholders and aggregated on the project website, *Nature and Culture at the Confluence* has an opportunity to develop impactful interpretive experiences based on mobile digital device platforms. The “locational awareness” of smart phones and other similar instruments makes it possible for them to deliver multimedia information targeted to specific locations, while the internal memory and internet linkages of these devices enables an almost infinite range of content type and depth. Photographic, video, audio, and text-based information can all be transmitted via personal digital devices, and users can select and individualize the interpretation to suit their interests and needs.



*Then Again: Change Over Time Photo Displays*

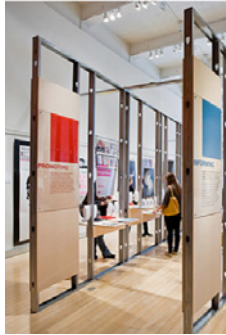
Stand-alone interpretive graphic installations at selected locations could compare the present setting with one or more historical views, advancing the key interpretive theme of “change over time” while offering viewers intriguing and sometimes provocative glimpses of the past.



*Past and present comparisons could focus on cultural heritage topics (such as the image on the previous page of a 1930's era class photo superimposed on a present-day photo of the site of the former schoolhouse) or on natural history events, such as this image of a once flooded city street.*

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### *Here and Now: Community History Exhibits and Activities*

Presentation of short-term, changing cultural heritage and community history exhibitions developed around core *Nature and Culture at the Confluence* interpretive themes should be distributed throughout the region, in venues as diverse as libraries and public building lobbies or restaurants and vacant retail storefronts, bringing stories of the confluence directly to a wide variety of potential audiences.



### *Connections at the Confluence: Public Programs and Events*

While development of Milltown State Park is still in progress, and even after the Park is fully operational and open to the public, involvement in off-site programs and events – from lectures and conferences to festivals and fairs – will provide *Nature and Culture at the Confluence* with a vital and visible public presence, introducing its themes, stories, and activities to new audiences and potential participants.

### *Remembering Bonner*

#### Interpreted Environments

The vacant millworkers' homes in Bonner offer powerful silent testimony to the lives that were lived here during the heyday of mill operations. One or more of these cottages might be renovated and repurposed as interpretive settings, with selected furnishings, graphics, and audiovisual and multimedia programs designed to evoke a sense of time and place.



*Restored, repurposed Bonner mill buildings could serve as venues for immersive interpretive experiences, enriching historical content with a powerful sense of place. Period furnishings or props can enhance the effect, along with costumed interpreters. Multimedia programs, such as a "magic mirror" video, can also serve to animate spaces and add emotional and informational depth.*



*Interpretive Parcourse: Storytelling and Fitness Trail*

To support the essential interpretive theme of movement, and to integrate interpretation with physical health and exercise, a storytelling and fitness trail along the river's edge linking city and county parks and connecting the confluence to downtown Missoula and points upstream, would invite visitors to move from station to station, learning something new at each stop along the way. Conducting a public design competition might yield innovative concepts for interpretive trail stations and structures while enhancing public awareness of the project and generating interest and support.



*Activity stations (like the examples shown above) could combine dimensional and graphical elements, mixing "hands on" and "minds on" experiences. Design could be streamlined or more rustic, possibly built using volunteer labor. Stations should be designed to be safe for users, low maintenance, and with minimal environmental impact.*



*Hints, clues, and other pieces of interpretive "evidence" embedded in the landscape along the trail can serve to call visitors' attention to their surroundings, stimulating curiosity and fostering engagement.*



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*Stations should be real destinations, "places," not simply signs. Shade and partial weather protection enhance user comfort; seating encourages longer stay-time; walls and apertures can be used to frame views.*

## 6. On-Site Interpretive Initiatives

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The following proposed interpretive initiatives would be most effective if located directly at the confluence, in all likelihood as part of the development of the new Milltown State Park. Again, we see these possible projects as opportunities for the Park, not requirements, and we understand that Fish, Wildlife & Parks will need to evaluate the feasibility and desirability of these ideas relative to their own physical, interpretive, and operational planning for the Park before deciding whether or not to undertake any one of them.

### *Confluence Gathering Place: Riverside Programs and Events Venue*

An informal, naturalistic amphitheatre located within sight of the confluence would provide an appropriate venue and a supportive context for a wide range of mission-related public programs and events, from lectures, presentations and performances to gatherings, festivals and fairs.



*Amphitheatre would be designed to respect and complement the natural landforms and vegetation of the site, evoking a strong sense of place and welcoming guests and users whether or not there is a program in progress. A formal presentation stage may or may not be included. Seating for the amphitheatre might be constructed from salvaged sinker logs, incorporating interpretively meaningful artifact materials into the physical design of the space.*

### *Pedestrian Bridge Interpretive Graphics*

Rail-mounted graphic panels on either side of the Black Bridge pedestrian walkway across the Blackfoot River, just upstream from the confluence, would interpret visible site features as well as related upstream and downstream stories. Panels might be sponsored by local/regional organizations or businesses. A similar and complementary installation could be displayed on the new footbridge proposed for the Clark Fork, downstream from the confluence – effectively bookending the heart of the new Park.

## Nature And Culture At The Confluence: Interpreting Milltown

### INTERPRETIVE STRATEGIES PLAN



#### *Pieces of the Past: Powerhouse Artifacts Display*

Modest alterations to the existing “blue shed” at the confluence site could enable in situ display of artifacts salvaged from the former Milltown Dam powerhouse, providing a powerful interpretive experience for the State Park on an accelerated timetable and at minimal cost. (It is important to note that any artifacts displayed in this manner would need to receive appropriate security and conservation measures to ensure their long-term preservation, consistent with the memorandum of understanding between the County and the EPA.)



*Replace existing roll-up door with clear glazed unit, providing “interpreted collections storage” viewing opportunities as well as potential public access. Roll-down security grates and motion-sensitive alarm systems could provide appropriate security during periods when the site is not staffed.*

*Remove small storage unit on south side. Add simple shed-roof addition to provide shade and minimal weather protection and provide a location for interpretation and small group gatherings (marshal walking tours, etc.)*

## Nature And Culture At The Confluence: Interpreting Milltown

INTERPRETIVE STRATEGIES PLAN



*Demise section of interior to create secure collections storage and display "storefront," retaining balance of space for operations. Display larger-scale objects in background, on existing palettes; smaller-scale objects in foreground, on simple pedestals or plinths, possibly with individual viewing windows on south wall.*

### *Confluence Playscape: Interpretive Play and Learning Environment*

A large-scale bas relief map of the confluence, etched into the paving at Milltown State Park, could provide opportunities for self-guided learning and discovery for visitors of all ages, while also serving effectively as a teaching tool, a pure play experience, and a focal point within the Park.



*Paving patterns like the examples shown above could illustrate topography and terrain as well as geographic locations and landmarks. Inlays add color, texture, and information. Adding water to the model, whether through natural rainfall or an artificial source, creates additional interpretive and play opportunities.*

*Bas relief model style could be realistic or somewhat abstracted, rendered in as much detail as desired. Incorporating Salish place names and other cultural information would increase experiential richness and interpretive depth.*



*History at Our Fingertips: Confluence Tactile Models*

Small-scale touchable models depicting the confluence at different points in time could be incorporated into the interpretive graphics program for the project, complementing flat graphic elements and providing effective interpretation for visually impaired guests and others with different learning styles



*Models can assist with site orientation while also providing interpretive information. Sites and features can be labeled directly on the model itself or described in a graphical key. Simple, durable materials such as steel or aluminum, bronze, or resin tend to perform best in exterior settings. Limited color palette helps users focus on dimensional elements: quantity, shape and form.*

*Depicting the confluence in dramatically different historical eras would effectively illustrate the theme of change over time. Visitors could experience side-by-side comparisons of the rivers before the dams were built; at the height of the industrial era; immediately following the breaching of the Milltown Dam; and after the natural floodplain and watercourses had been restored.*



## 7. Implementation Strategies and Recommendations

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We recommend that *Nature and Culture at the Confluence* be maintained as an ongoing program of Missoula County, consistent with the language of the EPA MOU, which states that “Missoula County will establish an interest-bearing Historic Preservation Trust Account for the Milltown Dam and Milltown Superfund site... for purposes of historical preservation and mitigation compliance at the Milltown Site.” There are three primary reasons for this recommendation:

**1. Inclusiveness.** The Missoula County government considers the needs and interests of *all* of the County’s citizens and visitors, and thus is the entity best positioned to ensure that Milltown-related interpretive initiatives are broad-based and inclusive, representing a range of both site-based and community-based activities.

**2. Efficiency.** The Environmental Health Department, the History and Culture Committee of the Working Group and the Historic Preservation Office have been actively engaged in coordination and oversight of Milltown-related historic preservation and mitigation activities since well before the removal of the dams and is fully capable of continuing these efforts, moving forward, with minimal overhead and organizational support.

**3. Effectiveness.** Having Missoula County assume responsibility for ongoing oversight of *Nature and Culture at the Confluence* as individual initiatives are developed and implemented will enable the project to take advantage of the significant knowledge base and human resources already available and working on compatible corollary initiatives throughout the county, including Montana State Parks, the University, the Confederated Salish and Kootenai Tribes, local schools and school districts, and numerous non-profit cultural and environmental organizations, without unnecessary operational redundancies or resource competition.

An existing fund of approximately \$100,000, held in the County’s Historic Preservation Trust Account established under the terms of the EPA MOU and the USFWS MOA, is available to be used to pursue implementation of Milltown-related interpretive initiatives (consistent with the specific directions and limitations spelled out in each of those memoranda.) We believe that the highest and best use of those funds will be to complement or support substantially self-funded initiatives and/or to leverage other resources. The EPA memorandum stipulates, “Funds addressed in this MOU may be used as matching funds to leverage additional funding for historic preservation activities related to

the Milltown site and the Bonner and Milltown Dams. The Missoula Board of County Commissioners shall approve expenditures from the trust, based on recommendations from the Redevelopment Working Group and its History and Culture Committee, and the Missoula Historic Preservation Commission.”

Scarcity of resources, both human and financial, is a reality for almost all public projects. *Nature and Culture at the Confluence* should seek to leverage its resources by offering challenge grants and matching funds, sponsoring contests and competitions, and seeking out in-kind sources of support. Consistent with this recommendation, we suggest the following broad guidelines for evaluating the relative value of proposed project initiatives:

**INCREMENTAL AND ONGOING**

*Nature and Culture at the Confluence* will benefit from being designed and developed to be as flexible and open-ended as possible.

Developing the project in stages over time will enable you respond more efficiently to changing circumstances and conditions on the ground, to identify and access a wider range of resources, and crucially, to learn from your mistakes. Incremental and ongoing development should be viewed as an asset, not a liability. Proposed initiatives which explicitly embrace this philosophy, and which are conservative and resource-efficient in their planned implementation and operational structures, should be favored for support.

**MEASURABLE PROGRESS, TANGIBLE RESULTS**

To remain relevant and valued by the community, *Nature and Culture at the Confluence* has to make tangible contributions to the quality of life in greater Missoula. These impacts may be relatively small-scale, but they must be positive, concrete, and reportable. Under-promise and over-deliver. Word of mouth is your most effective public engagement tool. While recognizing that careful planning and design are vital to the success of any interpretive project, initiatives that will result in practical, perceivable public benefits should be favored for support.

**VISIBILITY AND PUBLIC ENGAGEMENT**

*Nature and Culture at the Confluence* should undertake a broad range of strategies to stay in the public eye, inviting citizen participation at all levels and whenever possible. Doing so will position the project as truly grounded and community-based, helping to ensure its vitality even when resources are scarce. With an eye toward local capability and

capacity-building, proposed initiatives that offer concrete strategies for engaging citizens as active participants should be favored for support.

**STRATEGIC PARTNERSHIPS**

The presence in Missoula County of an unusually large number of non-profit groups and for profit enterprises whose interests and missions overlap that of *Nature and Culture at the Confluence* creates a significant opportunity for joint ventures. Whenever possible, the project should pursue initiatives in partnership with others. This has the potential to benefit both sponsoring organizations and helps to position you as an ally rather than a competitor. Proposed initiatives that involve a dedicated collaboration between two or more groups or organizations should be favored for support. Efforts already underway are moving in this direction: State Parks is forming a “friends group” for the Park, and TwoRiversHistory.org and the Bonner Milltown History Center are collaborating on website enhancements and an interactive map of the confluence. These and similar collaborative initiatives should continue into the future.

## 8. Resources, References and Comparable Projects

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The County's, State Parks', and the steering committee's choices about which confluence-focused interpretive initiatives to pursue, and in what combination or sequence, will be based on many factors: the availability of funds or potential project partners; community interest and support; State Parks schedules; feasibility, impact or prominence of the final product; critical need (for interpretive information and messaging); or intended audience – or most likely, some combination of the above. In any case, the decision to pursue an interpretive project will trigger a process, a series of activities and events that will inform the project's development and implementation. The purpose of this section of the Interpretive Strategies Plan is to provide you with basic guidelines for how to proceed through that process.

### *Audience*

Identifying and understanding your is target audience is essential to the success of any interpretive undertaking. While most interpretive experiences hope to reach as diverse a demographic as possible, they are always planned for a specific core audience. For example, the level and kind of information provided at a children's museum will obviously differ significantly from what is provided in an exhibition geared toward adults, even with the same basic content. This isn't to say that the kids' exhibit won't appeal to adults, or that the adult exhibit won't include messaging for younger visitors – just that they're different.

After deciding upon a project to pursue, you'll first want to identify who your primary audience or audiences are. You'll need to know who they are (retirees, school groups, locals walking their dog, etc.), why they are visiting or participating, what they want, and how knowledgeable they may be your interpretive themes. How much time might they spend at your initiative? Beverly Serrell, a highly regarded museum professional, consultant, and author, came up with a handy rubric for classifying audiences with regard to their level of interest and behavior within an exhibition. She divides visitors into three categories: streakers, strollers, and studiers. Streakers breeze through an experience, pausing only briefly at a few elements and glancing on the go. Strollers might linger longer at more elements than the streakers, but they're still basically grazing through. The studiers, as the name implies, will spend the greatest amount of time, looking closely and at many things and often are seeking content depth far in excess of what their less motivated counterparts are looking for. The goal is to create an experience that will provide something of value for each audience type. Define your core audience at the start of planning phase and refer to

that benchmark as you moved forward, using it to evaluate the relative value of proposed project components.

#### *Learning Styles*

Learning styles are the different schemes or strategies people use to make meaning of the world: the ways we interpret and process new experiences. Thinking about how and why people learn, and how they “process” their experiences, will influence and inform how you develop an interpretive initiative. There are many countless well established theories on this topic, including Bernice McCarthy’s 4MAT System, Howard Gardner’s Multiple Intelligences, Constructivist learning theory, and many others. You don’t need a PhD, but you do need to take learning styles into account when developing and designing your project.

The challenge is to create experiences that connect with and attend to a variety of learning styles. Some people learn best in a group, others on their own. Some make connections when they are actively physically engaged, while others have more success reading, talking, or even watching someone else. Many people prefer a clear sequence of information – chronology or step-by-step – to guide them on how they are supposed to experience the content, while others prefer a more random approach, gravitating to whatever attracts their attention or stimulates their sense. And of course, different types of content lend themselves to different presentation strategies. In the planning stages of your initiative, being aware of and trying to accommodate a diversity of learning styles will help you deliver your interpretive themes to a greater range and quantity of users.

#### *Interpretive Goals and Objectives*

After identifying your audiences and how they might learn and experience the interpretive initiative, it’s time to focus on which primary and secondary messages you want to communicate. What’s the take home message of the initiative? What do you want them to know, what do you want them to feel, and how do you want them to act or behave? Creating a list of learning, emotional, and behavioral objectives for the initiative will help guide and filter the content (information), if any, for the experience, and will inform the graphic and dimensional design directions, and overall looks and feel of the experience.

#### *Content Research*

If the initiative contains content or researched information, like an interpretive trail or a series of graphics, you may need to do some preliminary content research: studying the available information related



to the theme(s) you are addressing. Use the overarching interpretive theme and the selected primary and secondary themes to guide and direct the research. They should serve as filters. Refer back to the learning objectives identified earlier; what concepts or ideas does a person need to know in order to achieve this learning objective? Organize content into hierarchies; what's the primary and most important message? What might be listed as secondary or tertiary messages of information? Does the content you've selected support and relate the themes? How does it relate to the behavioral and emotional objectives?

After developing the content, create a content program or outline, organized by individual elements, signs, or other experiences. List what specific content or concepts you want to communicate at each element. Also include the interpretive objects (learning, behavioral, emotional) for each element, and provide a description of what your audience would see, do, smell, etc. This document will serve as a kind of master list of what's included in your initiative, and will inevitably get more detailed through the planning phases.

#### *Resources and Implementation*

Taking stock of resources and capabilities is essential in planning an interpretive experience. What are your in-house capabilities and resources for planning and implementing an initiative, and how much "sweat equity" are you willing to invest? What regional or community resources might be available, and on what basis? Take an inventory of what you actually need to complete your initiative, and look for ways to leverage your available "hard money" resources. For example, you might form partnerships with a local vendors – graphic designers, contractors, sign shops, etc. – who would be willing to provide services at a reduced cost in return for public recognition. Similarly, local businesses might be interested in small-scale underwriting or sponsorship opportunities. Exploring and capitalizing on your connections with area schools or universities can provide access to significant human resource capabilities in the form of students seeking work-study or thesis project opportunities. Look for ways to maximize connections with the community to plan and implement your initiative.

#### *Phases*

In general, exhibits and interpretive experiences are planned and designed in a series of phases that roughly parallel the traditional phases of architectural design projects. The phases build upon one other until the project is implemented or completed. Even with a

program-based initiative that doesn't require "bricks and mortar" design, approaching your project in an incremental, phased manner offers real benefits. Here are brief descriptions of each phase:

#### Schematic Planning and Design

The purpose of interpretive schematic planning and design is to establish a compelling conceptual framework for the project as a whole, to define content priorities and individual conceptual directions for each of its major exhibits, zones, or experiences and to produce an initial interpretive exhibit program and inventory of possible exhibit components.

Products developed during this phase of work include a preliminary content outline program, location and circulation drawings, proposed project schedule and phasing plan, and a design-preliminary cost estimates for all proposed components.

#### Design Development

The Design Development phase focuses on developing, reviewing and revising specific and detailed exhibit design drawings, descriptions and specifications (or, in the case of a programmatic initiative, program structures and descriptions) for all proposed project components. As these project components are developed they can be evaluated for their effectiveness and feasibility. Initial color and materials selections are made for all project components, as well as preliminary project graphic design directions, including typography and graphic standards for all graphics elements, proposed production methods and techniques, and guidelines for image selection and interpretive copy writing. Also, if required, functional requirements for exhibit lighting, and audio-visual and/or multi-media programs are identified. An updated cost estimate should be completed to ensure feasibility.

#### Final Design

In Final Design, all project components are finalized. Final design documents and specifications for audio-visual and/or multi-media programs (if any) will be completed and included. Colors and materials specifications for all project components are finalized, as are graphic design directions and specifications, including typography and graphic standards; proposed production methods and techniques; and graphics color specifications. Final exhibit text guidelines are established, and final photo and image directions are determined during this phase of work. This phase of work yields the "blueprints" for the project, enabling it to be implemented.

**COMPARABLE PROJECTS**

Several recent Main Street Design projects are relevant to the proposed Milltown projects:

*Rocky Mountain Arsenal National Wildlife Refuge  
Denver, Colorado*

The Rocky Mountain Arsenal National Wildlife Refuge, located just east of Denver, CO, has a unique and important history. Throughout time, the landscape has been transformed from a “virgin” short-grass prairie, to agricultural fields, to chemical munitions manufacturing facility, to a pesticide and insecticide production plant. But the Arsenal’s most recent transformation may be its most striking and significant: after a massive two decades-long cleanup effort, this former Superfund site is now the nation’s newest National Wildlife Refuge.

Bald eagles now roost where chemical weapons were produced, and this once high-security facility now welcomes recreational visitors. Outdoors, hiking and biking trails wind through a reconstructed short-grass prairie, while inside the new visitor center an exhibition developed and designed by Main Street Design explores the remarkable stories of this unique site.

The focus of the exhibition is on human interaction with this landscape over time. From the indigenous peoples’ earliest uses of the prairie as a vital seasonal hunting ground through successive waves of ever more intensive occupation, exhibits trace the evolving history of human involvement with the natural world here using immersive environments, interactive media, audio soundscapes, artifact and object displays, and replicated habitats and natural history models. The Arsenal’s military era is presented as one chapter in an on-going story, as is the ground-breaking effort to remove toxic wastes and restore the site’s ecological balance. The take-home message is fundamentally hopeful, focusing on how human determination and technological capability can be turned toward correcting mistakes of the past.

*Wells National Estuarine Research Reserve at Laudholm Maine  
Wells, Maine*

The Wells National Estuarine Research Reserve is a National Atmospheric and Oceanic Administration facility located on the coast of Maine and devoted to conducting scientific research into coastal water resource and environmental issues and developing planning and policy recommendations. It is also a spectacularly beautiful nature preserve on the site of a former working farm, nearly 1,000 acres of

woods and fields overlooking the Gulf of Maine, threaded through with walking trails.

This innovative exhibition, housed in an historic 18th Century farmhouse, traces the complex evolution of a place through time, using the Laudholm Farm site as a case study to explore the interaction between people and the environment from pre-Colonial times to the present day. Centered around a series of large-scale tactile models, each of which depicts a different point in time, exhibits explore the impacts of human actions – intended and unintended alike – on wild species and habitats. The final model isn't actually a model at all but a contemporary aerial photograph, drawing together past, present, and future.

Guests experience the fluctuating density of woodlands on the site, as Colonial settlers cleared the forest for farming and then, two centuries later, agriculture declined and the trees returned. Simple “reading the landscape” interactive elements embedded throughout the exhibition offer visitors hints on how to find evidence of change for themselves as they walk the Reserve’s trails.

## RESOURCES

### *Books*

Falk, John H., and Lynn D. Dierking. *Lessons Without Limit: How free-choice learning is transforming education*. Walnut Creek, CA: AltaMira Press, 2002.

Falk and Dierking's Contextual Model of Learning provides a practical framework to use when designing an informal (OK, free-choice) learning program. The book includes a wealth of guidelines for carefully considering each dimension (personal, social, physical) of their model. In brief, I highly recommend this book to parents, educators, and others interested in education outside the classroom. [Robert L. Russell, The Informal Learning Review]

McLean, Kathleen. *Planning For People in Museum Exhibitions*.

Washington, DC: Association of Science-Technology Centers, 1993.

This ASTC bestseller provides a broad understanding of the many disciplines needed to produce effective exhibitions- from industrial, graphic, and interior design, to writing, editing, psychology, and management. Appendices lay out an approach to exhibition critique and provide

guidelines for using environmentally friendly materials. [From the ASTC: Association of Science – Technology Centers]

Serrell, Beverly. *Exhibit Labels: An interpretive approach*. Walnut Creek: Alta Mira Press, 1996.

This book is not merely about choosing words to put on exhibit labels; it is about attracting, communicating, inspiring, and helping visitors get what they are seeking... Once you have read this book, it is impossible to ignore it. I find that Serrell's commentary comes to mind during all of my writing activities. One of the most notable qualities that gives the book its lingering nature is Serrell's personable voice throughout the text... This is an important text for anyone who is involved with the creation of exhibitions. (Kirsten Ellenbogen, *Journal of Interpretation Research*)

Brochu, Lisa. *Interpretive Planning: The 5-M model for successful planning projects*. Fort Collins: InterpPress, 2003.

This useful resource steps behind the scenes to explain in detail the process and scope of interpretive planning services from the perspective of the client, from proposal to final report. The essential elements of any good plan (management, markets, message, mechanics and media) are reviewed in detail along with samples of signs and structures that work (and some that don't). This book is essential reading for interpreters, planners and facility managers.

#### ORGANIZATIONS

*National Association for Interpretation (NAI)*

NAI is a 501(c)(3) not-for-profit professional organization dedicated to advancing the profession of heritage interpretation, currently serving about 5,000 members in the United States, Canada, and over thirty other nations. Individual members include those who work at parks, museums, nature centers, zoos, botanical gardens, aquariums, historical and cultural sites, commercial tour companies, and theme parks. Commercial and institutional members include those who provide services to the heritage interpretation industry.  
<http://www.interpnet.com>

*The Association of Science-Technology Centers (ASTC)*

ASTC is a 501(c)(3) nonprofit organization of science centers and museums dedicated to furthering public engagement with science among increasingly diverse audiences. ASTC encourages excellence



and innovation in informal science learning by serving and linking its members worldwide and advancing their common goals.

<http://www.astc.org>

*National Recreation and Parks Association (NRPA)*

NRPA is dedicated to educating professionals and the public on the essential nature of parks and recreation. Through learning opportunities, research, and communications initiatives, we strive to generate significant public support for our movement in order to advance the development of best practices and resources that will make parks and recreation indispensable elements of American communities.

<http://www.nrpa.org/default.aspx>

*Association of Nature Center Administrators (ANCA)*

ANCA promotes and supports best leadership and management practices for the nature and environmental learning center profession.

<http://natctr.org/>

*The Association for Living History, Farm and Agricultural Museums (ALHFAM)*

ALHFAM serves those involved in living historical farms, agricultural museums and outdoor museums of history and folklife. Since its founding in 1970, ALHFAM has been at the forefront of the growth and professionalization of the use of living history techniques in museum programs. ALHFAM members and member institutions can be found across the United States and Canada and in many other countries.

<http://www.alhfam.org/>

*Association of Outdoor Recreation and Education*

The mission of the Association is to provide opportunities for professionals and students in the field of outdoor recreation and education to exchange information, promote the preservation and conservation of the natural environment, and address issues common to college, university, community, military, and other not-for-profit outdoor recreation and education programs.

<http://aore.org>

*The Association of Partners for Public Lands (APPL)*

APPL is a not-for-profit organization working to enhance the potential of its members, who are dedicated to public understanding, appreciation, and stewardship of America's natural and cultural heritage.

Through education, information, and representation, APPL promotes

the vitality of its members and their programs of service and support to the agencies who oversee this nation's public lands.

<http://appl.org>

*Montana Environmental Education Association (MEEA)*

MEEA envisions a day when environmental education (EE) is fully embraced, supported, and integrated into every-day experiences; when citizens of Montana are involved in learning about our environment and our relationship to it from the time they are young and continuing throughout life — in our experiences at home, at school, in our work, and in our play. When developing environmental literacy is just... natural. After all, the environment is where we live.

<http://www.montanaeea.org>

*Association of Zoos & Aquariums (AZA)*

AZA provides its members the services, high standards and best practices needed to be leaders and innovators in animal care, wildlife conservation and science, conservation education, the guest experience, and community engagement.

<http://www.aza.org>

## 9. Project Contributors and Participants

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*Thanks to the following individuals and organizations whose participation in and contributions to this planning project were essential to its success:*

Missoula Board of County Commissioners

Montana State Historic Preservation Office

Missoula Historic Preservation Office

Milltown Superfund Redevelopment Working Group.  
History and Culture Committee

Missoula City – County Health Department

Montana State Parks, Montana Fish, Wildlife & Parks

Salish-Pend d’Oreille Culture Committee, Confederated Salish  
and Kootenai Tribes

Missoula Art Museum

Clark Fork Coalition

Bonner Milltown Community Council

CFRTAC

NRDC

Natural Resource Damage Program

University of Montana Watershed Health Clinic

University of Montana Department of Environmental Studies

University of Montana Archives

Ice Age Floods Institute

Bonner School

Bonner Milltown History Center

Historical Museum at Fort Missoula

Montana Natural History Center

Watershed Education Network

10,000 Waves Inc.

Travelers’ Rest Preservation & Heritage Association

The Historical Museum at Fort Missoula

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