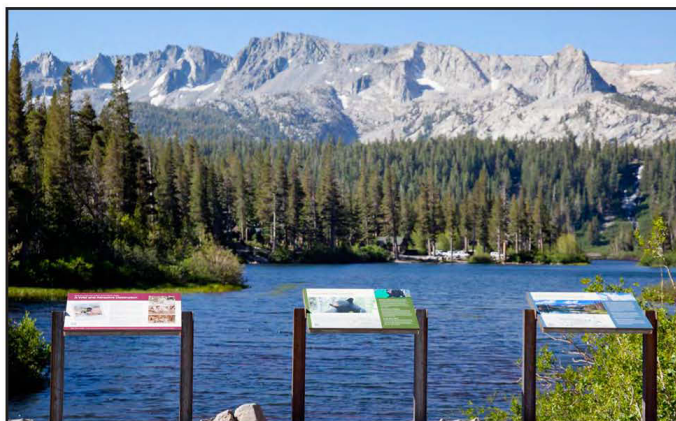




“Interpretive Services Planning: Opportunities for Interpretation along the Mammoth Lakes Trail System”

***Mammoth Lakes Trail System Coordinating Committee
November 28, 2012***





Interpretive Services Planning

Opportunities for Interpretation along the Mammoth Lakes Trail System
Prepared by David Scott and Christie Osborne

Updated July 25, 2012



BACKGROUND

- **Final Delivery to TOML July 25, 2012**
 - TOML/MLTPA Amend 01 + 02 Contract
 - Reviewed by TOML Spring 2012
 - Edits made by MLTPA at direction of TOML staff
- **Total Project Cost - \$17,326.62**
 - Measure R = \$14,525.26; General Fund = \$2,801.36
- **Authors**
 - David Scott w/assistance from Christie Osborne
- **TOML “Trail System Master Plan” Citations**
 - Recommendation G4 (p. 114)
 - Recommendation E4 (p. 154)

BACKGROUND - 22 TOML GP Citations

TOML goal	Goal Text	page	Relevant Topic Areas & Theme Genres	Comments
E2	Achieve sustainable tourism by building on the area's natural beauty, recreational, cultural, and historic assets	13	Natural topics Cultural topics Recreational topics	A system-wide interpretive program provides a low-cost activity that encourages tourism. The area's natural beauty, recreation, and cultural and historic assets can be targeted with
A1	Be stewards of Mammoth's unique natural environment	14	Natural topics	
A2	Be a vibrant cultural center by weaving arts and local heritage and the area's unique natural history into everyday life	14	Cultural topics	
A3	Encourage public art and cultural expression throughout the community	15	Cultural topics	
C2	Design the man-made environment to complement, not dominate, the natural environment	16	Media – Waysides	
C3	Ensure safe and attractive public spaces, including sidewalks, trails, parks and streets	17	Media – Waysides	
C4	Be stewards of natural and scenic resources essential to community image and character	20	Media – Waysides	
C5	Eliminate glare to improve public safety. Minimize light pollution to preserve views of stars and night sky	21	Natural topics – Physical Earth Cultural topics – The Modern Community	
L1	Be stewards of the community's small town character and charm, compact form, spectacular natural surroundings and access to public lands by planning for and managing growth	30	Cultural topics – The Modern Community Recreational topics – Outdoor Recreation	
L4	Be the symbolic and physical heart of the Eastern Sierra: the regional economic, administrative, commercial, recreational, educational and cultural center.	32	Cultural topics Recreational topics – Outdoor Recreation	
L6	Maintain the Urban Growth Boundary to ensure a compact urban form, protect natural and outdoor recreational resources; prevent sprawl	33	Cultural topics – The Modern Community	
M3	Emphasize feet first, public transportation second, and car last in planning the community transportation system while still meeting Level of Service standards	38	Cultural topics – The Modern Community	
P2	Provide additional parks within town	42	Entire program	Including interpretive signage in parks is mentioned explicitly in Policy P.2.E.1
P4	Provide and encourage a wide variety of outdoor and indoor recreation readily accessible to residents and visitors of all ages	43	Recreational topic – Outdoor Recreation	Interpretation of recreational opportunities in the Mammoth area would encourage participation in these activities.

Table 6: Matrix relating interpretive topic areas and theme genres to TOML goals as stated in the Town of Mammoth Lakes General Plan 2007 (continued on following page).

TOML goal	Goal Text	page	Relevant Topic Areas & Theme Genres	Comments
R1	Be stewards of habitat, wildlife, fisheries, forests and vegetation resources of significant biological, ecological, aesthetic and recreational value.	44	Natural topics	Interpretation encourages environmental stewardship.
R2	Maintain a healthy regional natural ecosystem and provide stewardship for wetlands, wet meadows and riparian areas from development-related impacts	45	Natural topics – Living Earth	Interpretation encourages environmental stewardship and can publicize actions taken by the TOML to preserve sensitive areas.
R3	Preserve and enhance the exceptional natural, scenic and recreational value of Mammoth Creek	45	Natural topics	Interpretation can encourage public behaviors helping TOML to achieve this goal.
R4	Conserve and enhance the quality and quantity of Mammoth Lakes' water resources	45	Natural topics – Physical Earth Cultural topic – The Modern Community	Interpretation can encourage a water conservation ethic at the tap (see R.4.B.), at the source, and around the yard (see R.4.C.1.)
R5	Minimize erosion and sedimentation	46	Natural topics – Physical Earth	Interpretation encourages environmental stewardship and themes relating to natural and human-caused erosion would help achieve this goal.
R6-11	Goals relating to energy, waste, pollution	46	Cultural topics – The Modern Community	System-wide themes could include these issues and interpret their importance and solutions.
S4	Maintain adequate emergency response capabilities	51	Natural topics – Physical Earth Cultural topics – The Modern Community	Forest fires, earthquakes, and volcanic hazards have been identified as interpretive topics based on their natural history, but also on their effect, or potential effects to the modern community. Interpretation is an effective way to teach people about these natural phenomena and what to do should one of them occur.
S5	Support high quality educational services and life-long learning resources within the community	52	Entire program	The development of system-wide interpretation gives teachers and their students opportunities for field-based learning as well as opportunities to become involved in local interpretive activities such as video and audio clips.

Table 7: Matrix relating interpretive topic areas and theme genres to TOML goals as stated in the Town of Mammoth Lakes General Plan 2007 (continued from previous page).

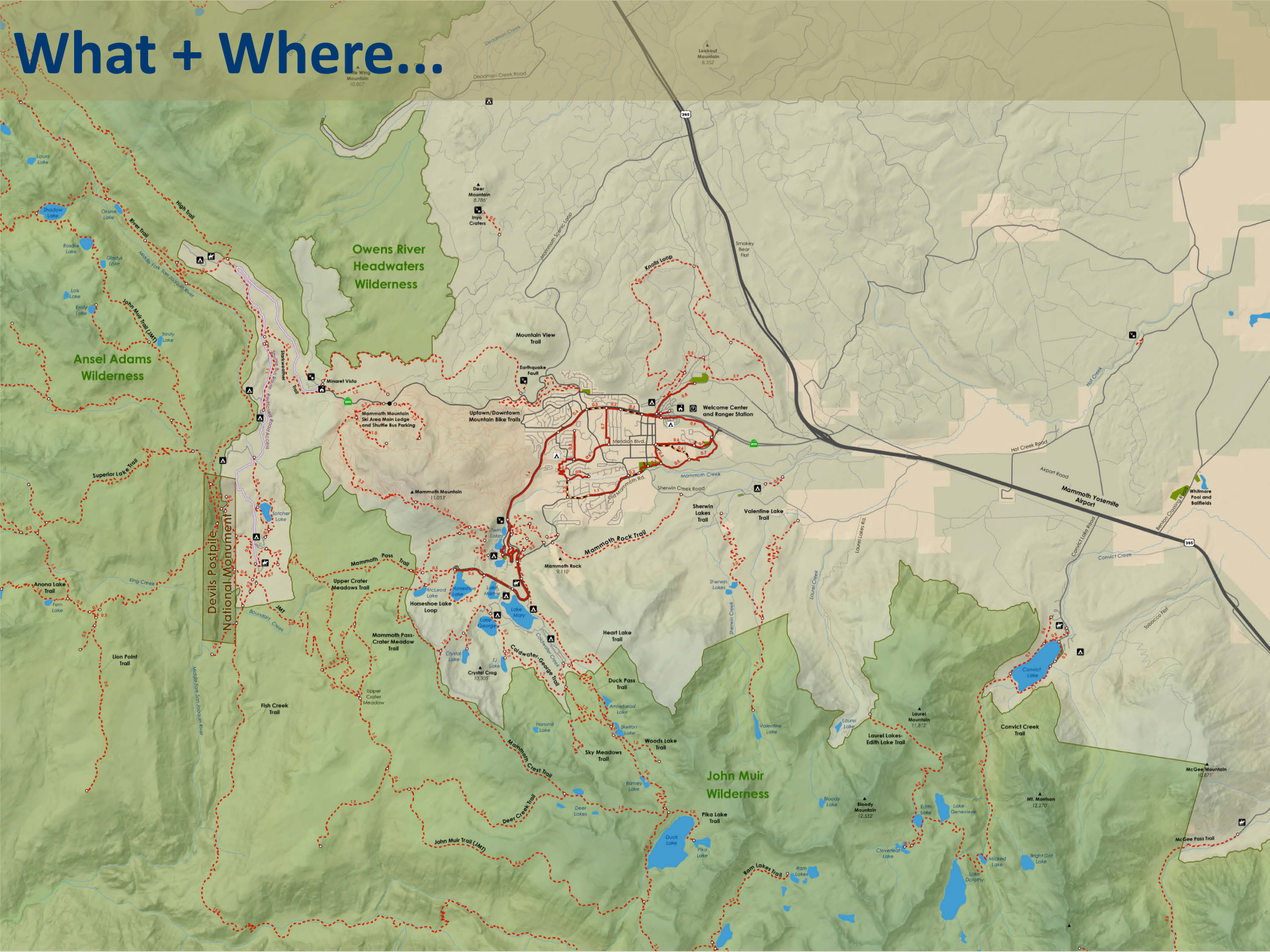
Designed for Implementation

“The Town and its planning partners recognize the importance of interpretation in enhancing tourism and recreation opportunities. This document is not a formal plan intended to be adopted by the Town; rather, its purpose is to provide guidance for the development of interpretive programming along the trails in lieu of a formalized plan, or to inform a comprehensive interpretation-planning process in the future. This document and accompanying data seek to answer three questions... “

Purpose

1. **What** features and stories could be interpreted along the MLTS?
2. **Where** could interpretation occur along the MLTS?
3. **How** could interpretation occur along the MLTS (i.e., what media and formats)?

What + Where...



What + Where...

Trails Analyzed for Interpretive Opportunities



Outstanding Opportunities for Topic-Specific Interpretation

- **Natural Features & Stories**

- Jeffrey pine forest
- Long Valley Caldera
- Mammoth Mountain
- Owens River
- Volcanism
- Casa Diablo Geothermal Field
- Pandora moth cycle
- Clark's Nutcracker
- Glaciation
- Mammoth Rock
- Resurgent Dome

Outstanding Opportunities for Topic-Specific Interpretation

- **Jeffrey Pine Forest**

- **Topic-area rank: #1**
- **Uniqueness/significance:** Nationally unique and regionally significant
- **Topic-area overlap:** Cultural (Native Cultures & Settlement History)
- **Notes:** The Mammoth Lakes area is home to the world's largest pure stands of Jeffrey pine forest. Nowhere else do Jeffrey pines dominate the landscape as they do along the Eastern Sierra near Mammoth Lakes. Jeffrey pine is the host species for the parasitic Pandora moth, which was harvested and eaten by native peoples. During the settlement period, it was a primary source of timber.

Outstanding Opportunities for Topic-Specific Interpretation



Purple: trails surveyed for this study. **Red:** trails suitable for this specific interpretive topic/program. **Green:** areas with outstanding potential for this specific interpretive topic/program. **Stars:** ideal points for interpretive discussion.

Outstanding Opportunities for Topic-Specific Interpretation

- **Cultural Features & Stories**
 - Public lands and management
 - Dave McCoy
 - Lakes Mining District
 - Mammoth Pass
 - The Hayden Cabin
 - Volcanic hazards awareness
 - The Lost Cement Mine
 - The Knight Wheel

Outstanding Opportunities for Topic-Specific Interpretation

- **The Hayden Cabin**
- **Topic-area rank:** Group #2
- **Uniqueness/significance:** Regionally unique
- **Topic-area overlap:** Recreation (Outdoor Recreation)
- **Notes:** While the Hayden Cabin was probably not the most important structure during its day, it has become exceedingly important because it is one of the few old cabins to have survived the rough winters and exploding booms of development that characterize Mammoth Lakes. It has been well preserved and lies just across Mammoth Creek from a popular section of MUP.

Outstanding Opportunities for Topic-Specific Interpretation



Purple: trails surveyed for this study. **Red:** trails suitable for this specific interpretive topic/program. **Stars:** ideal points for interpretive discussion.

Outstanding Opportunities for Topic-Specific Interpretation

- **Recreation Features & Stories**
 - High-altitude training
 - Camping
 - Fishing
 - Fish stocking
 - Mammoth Mountain Resort
 - Wilderness

Outstanding Opportunities for Topic-Specific Interpretation

- **Wilderness**
- **Topic-area rank:** Group #3
- **Uniqueness/significance:** None
- **Topic-area overlap:** Natural (Living & Physical Earth) and Cultural (Settlement History and The Modern Community)
- **Notes:** The proximity and extent of Wilderness in relation to Mammoth Lakes is truly remarkable. Hundreds of through hikers pass through the area each summer, and thousands more go on day hikes or short overnight trips. However, wilderness is not just a designation; it is a concept that many consider to be the pinnacle of the American conservation movement. It is also an important part of the history of the United States, though during the early years of exploration it generally evoked more fear and consternation than the pleasure and relaxation common today.

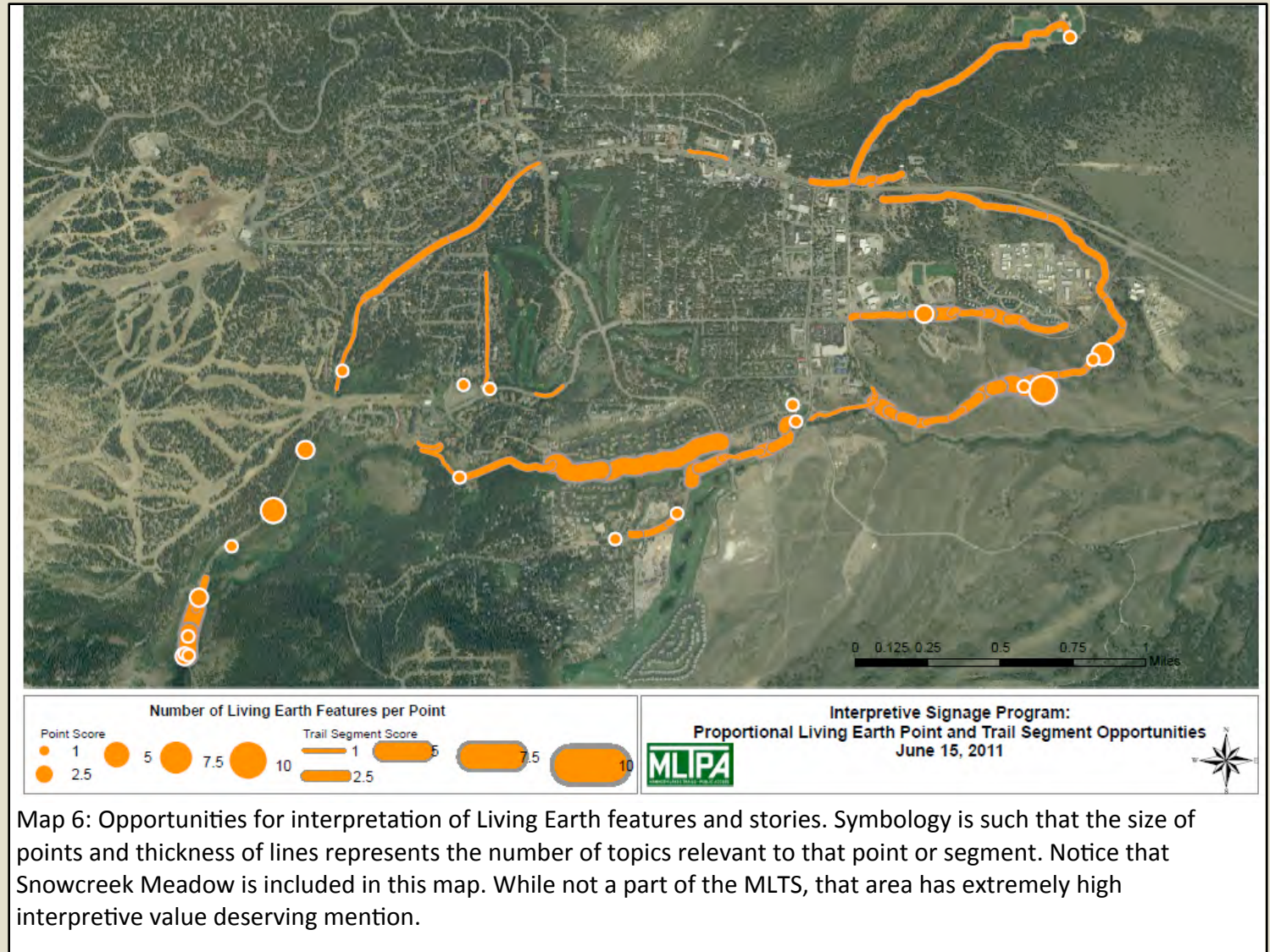
Outstanding Opportunities for Topic-Specific Interpretation



Purple: trails surveyed for this study. **Red:** trails suitable for this specific interpretive topic/program. **Stars:** ideal points for interpretive discussion.

Outstanding Opportunities for Theme Genre Interpretation

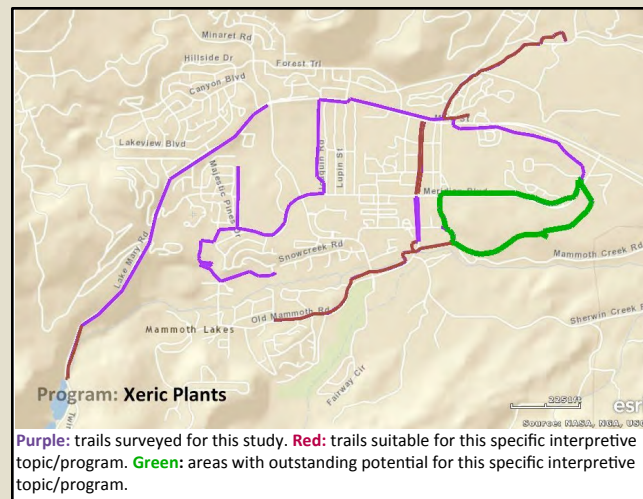
Living Earth (Natural Features & Stories)



Map 6: Opportunities for interpretation of Living Earth features and stories. Symbology is such that the size of points and thickness of lines represents the number of topics relevant to that point or segment. Notice that Snowcreek Meadow is included in this map. While not a part of the MLTS, that area has extremely high interpretive value deserving mention.

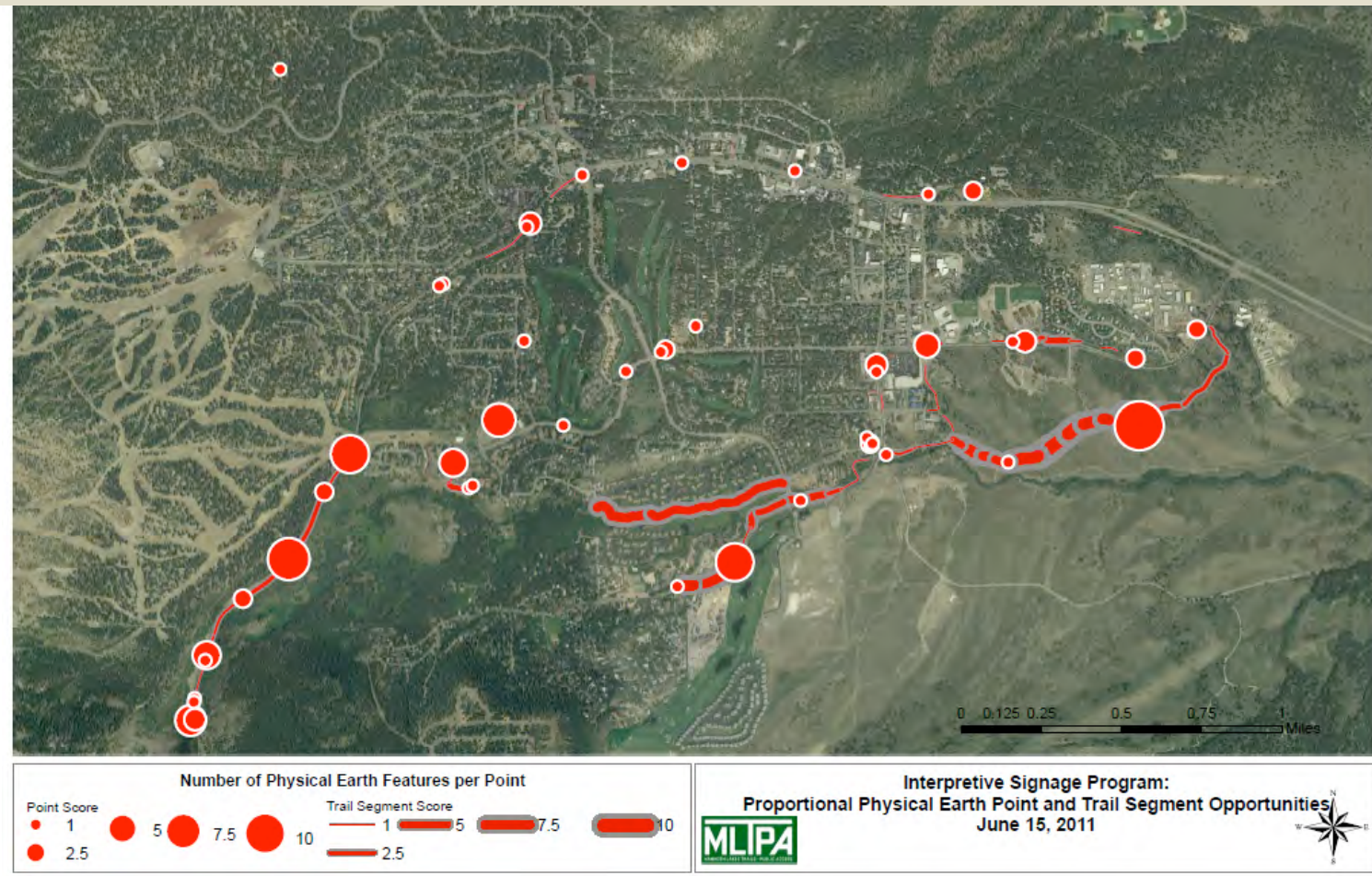
Outstanding Opportunities for Theme Genre Interpretation

- Three Programs...
- Program #1: **Mammoth-Area Xeric Plant Walk**
- This program tours the plant communities and affinities on drier slopes between town and Highway 395.
- Topics: *Avian migrations, bears, Eastern Sierra biogeographic region, elevational zonation, insects, Jeffrey pine forest, lower montane forests, montane scrub, plant communities, riparian communities, sage community*



Outstanding Opportunities for Theme Genre Interpretation

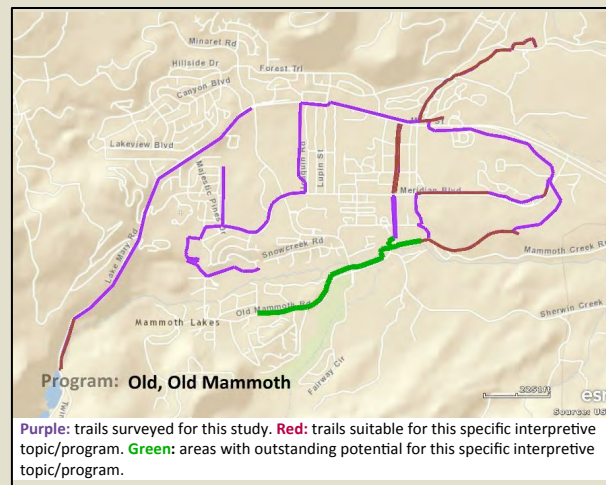
Physical Earth (Natural Features & Stories)



Map 7: Opportunities for interpretation of Physical Earth features and stories. Symbology is such that the size of points and thickness of lines represents the number of topics relevant to that point or segment. Notice that Snowcreek Meadow is included in this map. While not a part of the MLTS, that area has extremely high interpretive value deserving mention.

Outstanding Opportunities for Theme Genre Interpretation


- Five Programs...
- Program #6: **The Old “Old Mammoth”**
- This program provides visitors with a general overview of how the earliest communities in Mammoth came to be, who lived there, and how they all fell apart.
- Topics: *Lakes Mining District, The Hayden Cabin (mining equipment is older than the cabin itself), The Knight Wheel, The Lost Cement Mine, Mammoth Camp, Mammoth City, Mammoth Mining Company, Mammoth Pass, Old Mammoth Village*



Outstanding Opportunities for Topic Area Interpretation

Natural Features & Stories

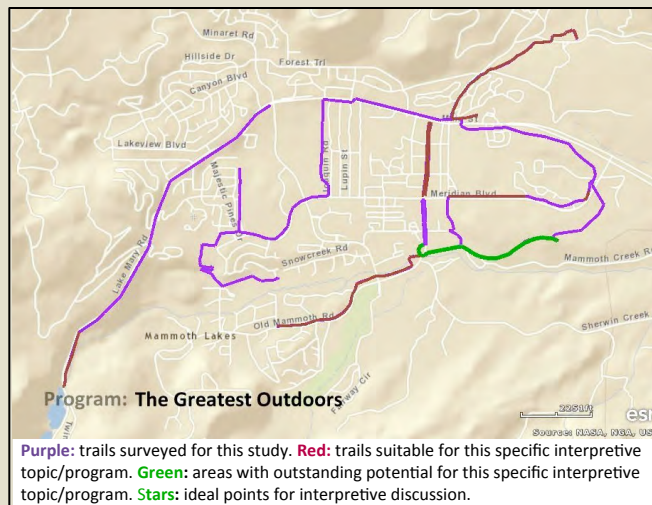


<p>Number of Living Earth and Physical Earth Features per Point</p> <h1>DRAFT</h1>	<p>Interpretive Signage Program: Proportional Living Earth and Physical Earth Point and Trail Segment Opportunities June 15, 2011</p>  
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Map 8: Opportunities for interpretation of Living & Physical Earth features and stories. Symbology is such that the size of points and thickness of lines represents the number of topics relevant to that point or segment. Notice that Snowcreek Meadow is included in this map. While not a part of the MLTS, that area has extremely high interpretive value deserving mention.

Outstanding Opportunities for Theme Genre Interpretation

- Eight Programs...
- Program #11: **The Greatest Outdoors**
- This program highlights some of the more popular activities in the Mammoth Lakes area and how these activities bring us closer to the land, closer to each other, and closer to ourselves.
- Outdoor Recreation topics: *Alpinism, camping, disabled sports, equestrian activities, fishing, mountain biking, off-road vehicle use, skiing, snowboarding, trail etiquette, wilderness*



How...



Opportunities for Interpretive Media Along the MLTS

- **How: Tools Analyzed**

- Personal Interpretation Media
- Printed and Graphic Interpretation Media
- Electronic Interpretation Media
- Personal Interpretation
- Guided Tours
- Roving Interpretation
- Printed and Graphic Interpretation
- Publications & Trail Guides
- Waysides (signage)
- Electronic Interpretation
- Website
- Cell phone tours
- Smart phone tours
- Content linked by QR code

Opportunities for Interpretive Media Along the MLTS

Personal Interpretation Media

Examples

- Guided walks
- Evening programs
- Roving interpretation
- Events and activities
- Storytelling
- Costumed interpreters
- Street theater

Advantages

- Very effective. Research shows that personal interpretation is the most effective kind of interpretation.
- Very flexible. It's designed specifically for your site and content can be modified easily.
- Inclusive. Can attract a wide audience with people from different ages and social groups.
- Complex stories can be told well.
- Can be creative.
- Responsive to different audiences and their needs on the day.
- Can generate income.
- Can attract good publicity.
- Social experience.
- Can be fun and exciting.
- Can involve multiple skills from different people.
- Can have an extended life through websites, photographs, video, reports, and press coverage.

Disadvantages

- Outdoor events are weather dependent.
- Some events reach only a small audience.
- Heavy in administration.
- Needs good marketing.
- Needs good forward planning.
- Requires initial financial outlay.
- Needs a range of skills in program development, delivery, coaching, and marketing.
- Audience size can be limited.
- Can be dominated by a single individual.
- Can be a one-off experience.
- If repeated, needs assessment and development (coaching).

Opportunities for Interpretive Media Along the MLTS

Printed and Graphic Interpretation Media		
<u>Examples</u>	<u>Advantages</u>	<u>Disadvantages</u>
Leaflets	<p>All printed and graphic materials:</p> <ul style="list-style-type: none"> • Can be unobtrusive in an area. • Have good initial impact. <p>Leaflets, publications, and trail guides:</p> <ul style="list-style-type: none"> • Encourage the use of a variety of senses. • Can be creative. • Can be used at one's chosen time and pace. • Some can be used in bad weather. <p>Leaflets, publications, and trail guides:</p> <ul style="list-style-type: none"> • Can be used on and off site. • Can earn revenue. • Can be cheap to produce per unit. • Have souvenir value: can be taken home. • Can alter language to suit audience. • Are portable and pocket sized. • Do not intrude on landscape. • Can involve partner organizations and local businesses as distribution outlets. • Can include more information than a wayside. • Can help orientation and navigation. <p>Outdoor panels:</p> <ul style="list-style-type: none"> • Available 24/7. • Focus attention on specific features. • Can reach a large audience. • Easy for people to use. • Do not need supervision. • Can help orientate visitors. • Low maintenance. <p>Indoor panels:</p> <ul style="list-style-type: none"> • Indoor panels/exhibitions can be secured. • Easier to be interactive than outdoor panels. 	<p>All printed and graphic materials:</p> <ul style="list-style-type: none"> • Need good design and writing. • Can require high initial financial investment. • May be ignored and left unread. • Are inflexible and dated once produced. <p>Leaflets, publications, and trail guides:</p> <ul style="list-style-type: none"> • Require effective distribution. • Revenue collection can be difficult with numerous small outlets. • Can be potential litter. • Have to compete for attention with numerous other publications. • May need regular reprinting. <p>Outdoor panels:</p> <ul style="list-style-type: none"> • May require planning permission. • Expensive to produce and install. • Need regular maintenance and upkeep. • Vulnerable to damage by weather, vandalism, animals. • Can intrude on landscape. • Can cause erosion around sign. • Inflexible content. • Static (boring to some). • Are widely used and may therefore become ignored. <p>Indoor panels:</p> <ul style="list-style-type: none"> • Need space/building. • Only available when building is open. • Immobile. • If high tech, prone to breaking.
Publications		
Trail guides		
Waysides		
Exhibitions		

Opportunities for Interpretive Media Along the MLTS

Electronic Interpretation Media

Examples

Websites

Audio guides

Podcasts

Interactive screens

CDs

Cell-phone tours

Smartphone tours

Advantages

- Appeals to a wide audience, including younger people.
- Not intrusive in the landscape.
- Opportunities for creative and exciting use of design, sound, images, and/or video.
- Can be multilayered.
- Opportunities for creative characterization.
- Can be multilingual.
- Can be used as storytelling.
- Material that can be downloaded from the Internet is accessible from some people's home or mobile devices.
- Information is easily updated.
- Can be innovative and interactive.

Disadvantages

- Relatively expensive start-up costs.
- Some people will feel alienated by the use of high-tech media.
- Users need access to specialized equipment: computer, smartphone, MP3 player, etc.
- Can isolate users from each other and from the site features
- Important operational issues such as equipment purchasing, storage, and charging.
- Technology is developing rapidly, so systems may become dated quickly.
- Equipment susceptible to serious faults or malfunctions.
- High-tech devices are vulnerable to damage and theft.
- Can be expensive to operate.
- Some equipment requires regular maintenance (e.g., charging batteries for mobile devices).

Source Material: Themes Identified by USFS

MAMMOTH LAKES
WELCOME CENTER
INTERPRETIVE PLAN

FINAL

MAY 1, 2008

PREPARED BY:
PENNIE CUSTER
WELCOME CENTER DIRECTOR

USDA FOREST SERVICE
INYO NATIONAL FOREST

Inyo National Forest
USDA Forest Service

Source Material: Themes Identified by USFS

Primary Theme: “The local landscape of the Eastern Sierra Nevada is very diverse and has created many recreation opportunities.”

Sub-Theme #1: “Highly visible geologic features provide the clues to a dramatic story of the geologic processes that have forged, molded and carved this dynamic landscape.”

Sub-Theme #2: “Visitors should be educated in ways to perform thoughtful recreation.”

Sub-Theme #3: “The diverse landscape includes many types of habitats that support a wide variety of plants and animals.”

Source Material: Themes Identified by USFS

“The creation of planning themes for an area requires a process of intense collaboration between area stakeholders and experts and is beyond the scope of this report. That being said, many of the locations along the MLTS are on land managed by the INF Mammoth Ranger District, which has already identified important primary and sub-themes in the *Mammoth Lakes Welcome Center and Mammoth Ranger District Interpretive Plan* (Custer 2008).”

Plan Recommendations: 1 - 5

1. Form a cooperative multi-agency panel to ***create or agree upon existing themes*** that will be targeted along the MLTS. This panel should contain members knowledgeable about the area and experienced in field-based interpretation.
2. ***Hire a project manager*** to coordinate the development of the program.
3. To start, ***plan several small interpretation projects*** devoted to *one* of the themes identified. Do not leave out any of the agreed-upon themes. Each theme should be represented by one project (e.g., a wayside).
4. ***Create one interdisciplinary program*** that incorporates and utilizes all of the theme-specific projects (above). This is a program, not a project. It will use and link all of the panel content.
5. ***Identify high-use locations*** where these projects could be implemented. Try to identify locations where the high-ranking features and stories overlap with high visitor use.

Plan Recommendations: 6 - 10

6. **Select suitable low-tech media**, probably a type of wayside, that can be built. This should be a physical, tangible object that trail users will see along the trail or at the start of the trail.
7. **Decide what kind(s) of high-tech media can be used** to enhance the content of that low-tech media. Can QR codes and/or a cell-phone tour be implemented there? If not, what are the other options for signage location in order to utilize enhanced high-tech media?
8. After themes, locations, and media (in that order) have been agreed upon, **select the most compelling or important features and stories** that should be interpreted there. High-ranking features should probably be prioritized and interpreted on low-tech signage. High-tech media can be used to interpret all the other features and stories.
9. **Identify local experts for the subject matter.** Identify all of the compelling and interesting stories for individual features and stories.
10. **Identify local experts in interpretation.** Allow them to use the art of interpretation to tie local expert knowledge to interpretive concepts that help visitors make *emotional*, as well as intellectual, connections using tangible, intangible, and universal concepts.

Plan Recommendations: 11 - 15

11. **Identify local artists** who can create graphics that are attractive and effective in communicating the facts and feel supporting the theme.

12. **Fabricate physical signage** in a way that complements (not dominates) the landscape and scene.

13. **Tie signage to high-tech media** that enhances content and interacts with the user.

14. **Build off of the physical signage infrastructure** by adding additional high-tech, low-cost opportunities interpreting related topics and features nearby. Let the signage be the physical nexus to ever-expanding opportunities (cell-phone tours, smartphone tours, guided walks, roves).

15. **Advertise, advertise, advertise.** The public won't use it if they don't know it is there.



Local Interpretation Partners + Opportunities

- Inyo National Forest
- Eastern Sierra Interpretive Association
- Southern Mono Historical Society
- Valentine Eastern Sierra Reserve
- Sierra Nevada Aquatic Research Laboratory
- Devil's Postpile National Monument
- Mammoth Unified School District
- The Mammoth Lakes Community

Regional Interpretation Destinations

- Yosemite National Park
- Bodie State Historic Park
- Mono Basin National Scenic Area
- Death Valley National Park

Coordination with MLTS Programs

- MLTS Website
 - QR Code Program
 - MR Award Spring 2012 “Website Enhancements”
- “Lakes Basin Stewards” - Friends of the Inyo
- “Consolidated Mine Tours”
- MLTS Standards Manual (Signage and Wayfinding)
- MLTS Marketing (with Mammoth Lakes Tourism)
- MLTS Photo Library
- New MLTS Trail Construction
- MLTS Fundraising

MAMMOTH LAKES TRAIL SYSTEM



Interpretive Program

Available Technology





Next Steps - Project Coordination

“These recommendations were made with the understanding that interpretation is a powerful tool for teaching and encouraging stewardship. Interpretation achieves this by fostering emotional and intellectual connections between the visitor and the place that is being visited. A sense of responsibility is created through understanding and appreciation of, and pride in, a place. In essence, strong bonds between person and place increase the desire to return to and care for that place throughout life. The MLTS and the community of Mammoth Lakes will benefit greatly from these bonds and for years to come.”

Next Steps - Project Coordination

- Where should this plan live?
 - Adopted as part of “MLTS Management Plan”?
 - Other?
- What’s the best way to integrate and coordinate the “Interpretive Services Planning: Opportunities for Interpretation along the Mammoth Lakes Trail System” into the MLTS program?
- Other Similar Plans/Program on the way
 - “MLTS Standards Manual”
 - “MLTS Management Plan”



Thank You!

