The following actions and recommendations have been developed through a series of public information meetings held in towns within and surrounding the Green Mountain National Forest in the spring and fall/winter 2010. The meetings were convened by the Vermont Trails Collaborative - Landscape Management Work Group (LMWG) - in collaboration with state-wide and local trail groups and Regional Planning Commissions, to elicit local and regional input focusing on six general topic areas. The meetings were warmly received, bountifully attended, and produced copious local and regional input.

The general gist of the meeting information can be summarized as follows:

- Participants identified many opportunities to improve both connectivity and sustainability of the trails network.
- Participants expressed great appreciation for the locally available opportunity to meet, identify issues, and begin or continue collaborations among diverse interest groups.
- There was (surprisingly) little articulation of user conflicts.
- There was clearly articulated need for greater enforcement against illegal/unauthorized uses.

Most recommendations are envisioned to be carried out by a state-wide Vermont Trails Coordinator – a newly created full time paid position to be funded by a consortium of agencies and organizations. The coordinator would work under the direction and guidance of the Vermont Trails and Greenways Council (VTGC) to achieve the desired objectives of this recommendations report, and be the keeper of all records, maps, and databases associated with their assigned work. The specific design and function of this position can be agreed to by the VTGC and contributing funders. Some potential scenarios to consider:

- The VTGC and representatives from the contributing funders, Regional Planning Commissions, and select trail organization(s) may act as council to the coordinator.
- The council may provide assistance for the development and implementation of the recommendations included in this report.
- The coordinator may solicit funding for part time staff.
- The coordinator may oversee Americorps position(s).

This report, although final, is anticipated to be augmented by similar information meetings to be held in the northwestern and northeastern portions of Vermont in 2012. More detailed information associated with this report can be found in the notes for each meeting, as well as on the maps used as part of the information gathering process. The LMWG objectives relative to each issue preface the sets of related actions and implementation recommendations.

**Issue I. Trail Connectivity/Trails with Multiple Landowners**

**Objectives:**

1. Identify high priority state-wide or regionally important trails that transition across various landowners.
2. Determine priority trails for protection and management in perpetuity through identifying land interest acquisition (easements, fee, etc.) and/or management agreement priorities to protect against potential gaps or resolve existing gaps in the trail network.
3. Identify new opportunities to connect existing trail systems, segments and special features.
**Identified actions needed to meet objectives:**

- Continue to develop list of existing important trails at the state-wide, regional and/or local level. Trails information collected to date:
  - Important trails at the state-wide level
    - Appalachian and Long Trail systems
    - Catamount Trail
    - Snowmobile trail system managed by VAST
    - Northern Forest Canoe Trail
    - Rail Trails
  - Important trails at the regional level
    - West River Trail (x-country ski, hike, bike)
    - Mad River Path (x-country ski, hike, bike)
    - Mountain Valley Trail system (x-country ski)
    - Windmill Hill Pinnacle Association (WHPA) (ski, hike, bike)

Trails in the Vermont Trail System are listed on the VTGC website (www.vermonttrailsandgreenways.org)

- Continue to identify priority state-wide, regional and/or local existing trail segments that are in need of protection and management in perpetuity. Trail information collected to date:
  - Acquire land or obtain easement to protect Appalachian Trail in Stamford, Winhall, Killington, Hartford, Norwich, and the Chateaugay area (Stockbridge, Bridgewater and Barnard).
  - Acquire land or obtain easement in Waitsfield and adjacent towns to protect Mad River Path and side trails.

- Continue to identify a comprehensive list of opportunities to have new direct or loop trail connections for existing trail systems, segments or special features. Information collected to date includes the following opportunities within the north/south zones of the Green Mountain National Forest and surrounding areas:
  - North Zone (north of Highway US 4)
    - North Country Trail connect Crown Point, NY to AT (hike)
    - Mad River Path connect Warren to Moretown (x-country ski, hike, bike)
    - Pittsfield to Chittenden (bike)
    - Chittenden to Shrewsbury (snowmobile)
  - South Zone (south of Highway US 4)
    - WHPA trail system to West River Trail system (x-country ski, hike, bike)
    - Emerald Lake to Dorset Peak (hike)
    - Equinox trail system to Merck Forest trail system (hike)
    - Mountain Valley Trail system (bike loop)
    - North of Route 9 to Kelley Stand (horse loop)
    - Connect existing trail system in Stratton/Somerset area (horse)
    - Grout Pond to TransCanada trail system or West River trail systems (hike)
    - Need trailheads for horse trailers along Route 9
  - General
    - Improve disability access

**Recommendation(s):**

- Secure funding for a state-wide Vermont State Trails Coordinator – to be provided through the National Park Service, USDA Forest Service, ANR-Forests, Parks and Recreation, VTrans, and various to be identified grants and foundations. Responsibilities of this position would include, but not be limited to:
  - Regularly canvassing user groups, agencies and non-profit organizations to provide trails information.
  - Maintaining public database including site specific trail information and locations identified by GIS map layers.
  - Coordinating priority trail planning and activities to meet collaborative objectives.
  - Support the development of the Vermont Trail Finder. (recommendation)
Issue II. Ecological Impacts from Trails

Objectives:

1. Identify a set of physical/ecological indicators of concern.
2. Utilizing existing information, identify potential sources of physical and ecological impacts resulting from trail related activities.
3. Provide recommendations to address identified areas of concern where trails may be adversely impacting physical and ecological indicators.

Identified actions needed to meet objectives:

- Continue to identify physical/ecological indicators and sources for impacts of concern. Indicators/sources collected to date:
  - Erosion and rutting
    - Illegal motorized use
    - Poor trail location and/or design
  - Presence of non-native invasive plants (NNIP), sources include:
    - Trail corridors, trailheads, vistas and parking areas where infestations currently exist as seed sources
    - Equipment during construction and maintenance
    - Manure
    - Human distribution (e.g., hikers, bikes, vehicles)
  - Flooded trail tread
    - Beaver
    - Poor trail location and/or design
  - Trail “creep”
    - Circumventing physical barriers
    - Poor trail location and/or design
  - Sensitive Habitat (wetlands, rookeries/nesting, deer wintering areas, mast)
    - Winter use
    - Noise
    - Motorized use
    - Trail location
- Encourage sustainable trail location, design (trail construction standards), and management through workshop/training, and outreach activities. Trail information collected to date:
  - Careful trail location, design (trail construction standards) and management
    - Reroute or construct trails in more sustainable locations
    - Consider temporary or permanent trail closures
    - Seasonal closure or designate timing of use
    - Conduct regular monitoring
    - Provide workshop/training opportunities for trail crews and managers
  - Implement NNIP preventive measures
    - Monitor trailheads and other disturbed sites for invasive plants; control NNIP infestations when they are detected
    - Clean equipment before and after entering sites
    - Minimize ground disturbance and/or increases in sunlight reaching the forest understory where NNIP infestations or seed sources are known to occur
    - Use native or natural seed mix for erosion control
    - Balance the need for NNIP preventative measures with pragmatic trail building and maintenance practices
  - Develop techniques to address beaver/flooding
    - Proper trail location and design
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- Water level control
- Beaver population control
- Provide reporting mechanism from trail users to provide feedback to managers
  - Post trails with Vermont Universal Trail Ethics signs
- Encourage responsible trail use through education, communication, and outreach activities
  - Implement the Vermont Universal Trail Ethics Education Initiative
  - Coordinate state-wide and/or regional message through media outlets regarding why trails are closed during mud season

Recommendation(s):
- The proposed Vermont Trails Coordinator and/or (with added funding and support) the Vermont Trails and Greenways Council (VTGC) could monitor, coordinate and implement education/outreach actions to meet objectives in conjunction with user groups.
- The University of Vermont and USDA Forest Service Northern Research Station should conduct research recommended by the Vermont Trails Collaborative science panel. (Note: Science Panel recommendations are not prioritized; specific research prioritization would be agreed to by the VTGC and contributing funders).

Issue III. Trail User Relations

Although “Trail User Conflicts” was the original issue conveyed to public meeting participants, it quickly became apparent that little conflict actually existed between user groups. Feedback indicated that user groups work together productively most of the time.

Objectives:

1. Identify social factors (such as noise, conflicting uses, safety, etc.) that cause trail based user conflicts.
2. Identify locations and sources of existing and potential trail user conflicts.
3. Provide recommendations to address existing and potential trail user conflicts.

Identified actions needed to meet objectives:

- Continue to develop a list of site-specific user conflicts through collaboration with user groups. Conflict information collected to date:
  - Motorized v. non-motorized
    - High speed can be a safety issue (snowmobiles and skiers on same trail)
    - Noise impacting backcountry experience
  - Non-motorized v. non-motorized
    - Manure from horses or dogs (skiers or hikers)
    - Horses in winter impacting snow conditions for skiers
  - Recreation v. non-recreation
    - Logging activities
  - Site specific locations where conflicts exist
    - Root Beer Ridge Trail in Weston area (x-country ski) impacts from logging activity
    - IP Road (FR 341) in Stratton/Winhall areas; conflicts between snowmobiles with groomers and dog mushers
    - Continue to develop list of site-specific user conflicts through collaboration with groups
- Continue to provide a forum for user groups to minimize or prevent trail use conflicts
- Implement the Vermont Universal Trail Ethics Education Initiative
- Improve or develop, and implement education and management activities to accommodate multiple user needs
  - Establish standard rules and regulations (posting speed limits, designation of single use trails, etc.)
̶ Separate uses when multiple use trails are identified to be a safety issue or when conflicts are self
evident
̶ Separate trails uses spatially or temporally where unresolved conflicting use has been identified
̶ Design trails to accommodate multiple user types
̶ Improve signs that indicate allowed trail uses
̶ Establish and provide reliable and standardized trail maps that clearly show allowed uses

Recommendation(s):
- With added funding and support the Vermont Trails and Greenways Council (VTGC) could provide an
  avenue for trail user groups and managers to discuss trail user relations and cooperative management
  activities.
- The VTGC, USDA Forest Service, and ANR-Forests, Parks and Recreation should actively embrace and
  implement the Vermont Universal Trail Ethics Education Initiative.
- Explore other forums that continue the collaborative process to address state-wide, regional and/or local
  trail user relations.
- The proposed Vermont Trails Coordinator should work with user groups to identify site-specific user
  conflicts and multiple-use opportunities.

Issue IV. Existing Supply and Demand for Trails

Objectives:

1. Utilize existing data to identify/quantify supply A) of existing trail based recreation opportunities and B) the
   trends of demand for different public recreation activities.
2. Identify multiple uses that can be compatibly shared on existing trails.
3. Provide recommendations to address areas where the existing supply of trail based recreation
   opportunities does not meet the public demand for experiences.

Identified actions needed to meet objectives:
- Complete a statewide assessment of existing trails by managed use
- Update state-wide recreation trend information
- Continue to develop a list of site-specific opportunities for multiple use trails through collaboration with user
  groups. Multiple trail use information collected to date:
  - Horse use on snowmobile trail system (general)
  - Bike use on snowmobile trail system on Grout Pond to West Trail in Stratton area
  - Bike use on snowmobile trail system on Dome Trail/Stage Road in Readsboro area
  - Bike use on Mountain Valley Trail system in Weston area
  - Use existing Nordic trail systems for other uses when appropriate
- Conduct comprehensive trail planning and implement accordingly
  - Continue collaboration effort to identify user type demands and specific locations desired by user
    groups
  - Conduct formal user group surveys
  - Use indicators such as over-use of existing trails or user group membership
  - Identify areas that will support new trail uses or additional uses of existing trails in areas of high
    demand. Supply and demand information collected to date:
      - Generally, the uses for which demand is greater than supply are horses, bikes and ATVs
      - Specific information collected to date includes the following areas where new trail opportunities
        exist within the north/south zones of the Green Mountain National Forest and surrounding areas:
        - North Zone (north of Highway US 4)
          - Pittsford area (bike)
          - General area (horse)
          - General area (ATV)
South Zone (south of Highway US 4)
- Good opportunity for trail network near Bennington Fish Hatchery (hike)
- White Rocks and Equinox areas (bike)
- Ultley Brook area (bike)
- Glastenbury area (horse)
- Weston area (horse)
- Old Stage Road in Readsboro/Searburg area (ATV)
- Sucker Pond in Stamford area (ATV and bike)
- Bennington area (snowmobile)

General
- High elevation ski trails
- Backcountry trail experience

Recommendation(s):
- The proposed Vermont Trails Coordinator should develop a mechanism or agreement with the USFS, ANR and user groups to compile existing data into a state-wide database by allowed trail uses. The database can be compiled into GIS layers by VT Center for Geographic Information (VCGI).
- The University of Vermont (UVM) should update the 2004 Social and Economic Assessment Report prepared for the Green Mountain National Forest (GMNF).
- ANR-Forests, Parks and Recreation should update recreation trend information as part of the update to the State Comprehensive Outdoor Recreation Plan (SCORP).
- The USDA Forest Service should complete comprehensive trail planning specified in the GMNF Land and Resource Management Plan; likewise, with added support and funding the VTGC could complete state-wide comprehensive trail planning in conjunction with UVM and/or Regional Planning Commissions.
- The GMNF should update their trails data and produce maps that show trails by managed use.

Issue V. Trail Funding/Volunteer Management

Objectives:

1. Identify major sources of trail based funding that benefit trails.
2. Develop standard baseline cost estimates by use type for establishing and maintaining trails, including deferred maintenance.
3. Provide recommendations on how trail management organizations can work together to leverage scarce funding.
4. Provide recommendations on how to recruit and maintain volunteers

Identified actions needed to meet objectives:
- Continue to identify sources, share information and seek funding for trail organizations and projects. Funding source information collected to date:
  - Target USDA Forest Service funding to partners on National Forest System lands
  - Enhancement funding through VTrans
  - Explore monies from Public Lands Highway Fund
  - Raise funds through membership fees and/or dues
  - VT Recreational Trails Grants funds
  - Ask the National Park Service Rivers, Trails and Conservation Assistance Program coordinator to compile list of existing funding sources
- Compile a list of existing sources that provide standard baseline cost estimates by use type for establishing and maintaining trails (including deferred maintenance).
  - Conduct survey of user groups to establish standard baseline cost estimates
- Develop a mechanism for trail organizations to leverage and pool funding sources through collaboration
  - Conduct grant writing workshops
• Continue to develop and implement recommendations on recruiting and maintaining volunteers. Ideas collected to date:
  ➢ Streamline volunteer recruitment and maintenance program
  ➢ Provide free training to volunteers
  ➢ Develop volunteer incentives to increase volunteer interest
  ➢ Focus on the young and first time users through education/outreach

Recommendation(s):
• The proposed Vermont Trails Coordinator should collaborate/facilitate funding and volunteer development program.
• The proposed Vermont Trails Coordinator should maintain a clearinghouse of available grants and funding opportunities.
• The proposed Vermont Trails Coordinator, in conjunction with the Vermont Trails and Greenways Council, should maintain a database and website with standard baseline cost estimates by use type for trail construction and maintenance.
• Federal agencies should simplify requirements for volunteer involvement.
• The Vermont Trails Coordinator should maintain a clearing house and website for volunteer opportunities and potential volunteers.

Issue VI. Unauthorized/Illegal Uses of Trails

Objectives:

1. Identify A) existing types and B) locations of unauthorized uses
2. Provide recommendations on how to address unauthorized uses to land managers.

Identified actions needed to meet objectives:
• Continue to identify types and locations of unauthorized/illegal use activity through collaboration with user groups and monitoring. Sampling of information collected to date (Reference the Landscape Management Work Group public meeting notes available on the Vermont Trails Collaborative website for a detailed listing of unauthorized/illegal use by type and location):
  ➢ Types of unauthorized/illegal use
    ✓ ATVs and 4x4s off-road and on-road when not authorized for that use
    ✓ Snowmobile use off designated trails or on property without landowner permission
    ✓ User generated trails when it involves cutting of trees or substantial impact to resources
    ✓ Use of trails on land that is specifically posted prohibiting access
  ➢ Locations of unauthorized/illegal use
    ✓ ATV use on Appalachian Trail (AT) in Glastenbury area, near AT near Sucker Pond in Stamford
    ✓ ATV use crossing Bald Mountain Trail (FT 435) near Bennington
    ✓ ATV/4x4 uses on Up Trail to Glastenbury Tower
    ✓ Bikes in Rob Ford Meadows in Granville
    ✓ Non-designated snowmobile trail leading out of Chittenden Reservoir area
    ✓ ATV use off Fassett Hill/Taylor Brook areas in Hancock
    ✓ Cutting trees and making ATV routes near AT/LT corridor near intersection of FR 273
• Continue efforts in trail user education. Ideas to consider include:
  ➢ Implementation of the Universal Vermont Trail Ethics Initiative
  ➢ Initiate program for off road vehicle vendors to provide information on where ATVs can legally ride
  ➢ Develop and initiate a state-wide education campaign
• Implement and improve trail management techniques designed to control unauthorized uses. Information collected to date:
  ➢ Identify areas for legal use
  ➢ Consider use of gates/barriers to prevent unauthorized uses
➢ Explore other barrier techniques to prevent unauthorized uses
➢ Increase use of consistent and standardized signing
➢ Develop and provide easily accessible maps showing allowed use
• Improve enforcement

Recommendation(s):
• Local users and trail managers should document and report unauthorized uses to appropriate federal, state or local authorities and user group organization(s)
• The Vermont Trails and Greenways Council (VTGC) should continue to disseminate and develop educational information on unauthorized uses including supporting the Vermont Trail Finder, an on-line resource showing spatial trail locations with allowed uses.
• The proposed Vermont Trails Coordinator, in conjunction with the VTGC, should maintain a database of techniques for controlling unauthorized uses including signage and barriers, made available through a publicly accessible website.
• State and Federal agencies should increase enforcement focusing on public safety and negative environmental impacts of unauthorized trail uses.
• The USDA Forest Service should update their trails map clearly showing allowed uses.
• Towns should work to clear up the status of, and allowed uses on, Class 4 roads and legal town trails.