VERMONT STATE HAZARD MITIGATION PLAN **STEERING COMMITTEE MEETING, JULY 2017**

State Hazard Mitigation Plan Steering Committee Meeting July 12, 2017 | 1-3 PM The Nature Conservancy, Montpelier, VT

Members Attending:

- Chris Cochran, ACCD
- Bob Costantino, AHHS
- Catherine Dimitruk, Northwest Regional Planning Commission
- Jennifer Fitch, BGS
- Greg Hanson, National Weather Service
- Jen Hollar, Vermont Housing & Conservation Board
- Mike Kline, ANR
- Steve Libby, Vermont River Conservancy
- Rose Paul, The Nature Conservancy
- Parker Riehle, VT Ski Areas Association
- Tim Schmalz, Agency of Agriculture
- Gaye Symington, High Meadows Fund

Staff: Lauren Oates and Stephanie Smith, Vermont Emergency Management Facilitators: Rebecca Sanborn Stone and David Hohenschau, Community Workshop

Agenda & Notes:

1. Updates & Progress

- a. Updates around the State
 - Heavy rains caused significant statewide damage in early July, especially in the Upper Valley. Vermont estimated upwards of \$5M in damages at the time of the meeting, and FEMA was currently in state assessing damage. If approved, relief funding could range up to \$1M.
 - 1. Participants shared several signs of success: several Irene buyout sites flooded, resulting in no additional damage; Upper Valley's COAD was poised to move quickly and hire case managers to help people.
 - 2. Others shared signs of work still needed: a home in Springfield severely threatened by an active landslide; many road and culvert washouts.
- b. Process Updates
 - i. We are moving through the "Understanding the Challenges" phase and will begin developing strategies at the August Working Group meeting
 - ii. Three working groups met for two hours each in June in Waterbury.
 - 1. Approximately 40 people participated, with roughly 20-25 in each group (many people stayed for more than one meeting).
 - 2. Feedback was very positive, with many people stating that they thought it was critical to be continuing these conversations.
 - 3. Working groups accomplished three things:

- **a.** Started inventorying state capabilities (skills, assets, resources, data, etc.) and evaluating what is or is not working.
- **b.** Offered language suggestions to flesh out and improve draft goals in working group areas
- **c.** Started brainstorming objectives (categories to help organize actions)
- c. We sent out a pre-survey to gauge Steering Committee members' thoughts on unfinished business and new proposals before the July meeting; approximately 12 people responded. Details on the survey topics and responses were discussed later in the meeting.

2. Principles, Goals & Objectives

- a. VEM & Community Workshop reviewed the overall structure of the vision, mission and goals after going through all feedback from the Working Groups. They proposed several significant changes, which the Steering Committee Reviewed and discussed in July:
 - i. Considering the goals and objectives to be "working" for now, which allows us to continue making adjustments to accommodate new thinking and ideas, while not getting bogged down with wordsmithing.
 - ii. Eliminating the concept of "overarching goals" and instead moving forward with "overarching principles" (that set direction for planning) and goals (which have clear direction and strategies). See prep packet for full text of goals and principles.
 - 1. The four overarching principles would address climate adaptation, vulnerable populations, economy & affordability, and building relationships for action.
 - 2. The goals would include the three already approved and assigned working groups (Environment & Natural Systems, Built Environment, and Plans & Policies). The fourth proposed goal would address Education & Outreach, which leaves us with a set of four aligned exactly to FEMA's categories for action.
- b. The Steering Committee broke into groups to brainstorm objectives for the new communication & outreach goal. VEM & Community Workshop will synthesize those draft objectives and introduce the full revised set at the August Working Group meeting.

Steering Committee discussion & decisions on principles, goals, and objectives:

- Committee approved the new proposed structure of overarching principles, goals and objectives
- Committee approved the concept of leaving goals in "working" state for now
- Committee approved the four proposed principles, with the addition of "environment" to Principle 3.
- Committee approved the four working goals, with the following suggestion (to be incorporated with additional working group feedback):
 - adding "ecological function" to the Environment goal to acknowledge that functioning ecosystems are important above and beyond the component pieces
- Discussion points that will be incorporated in other ways:
 - We will adjust wording of Planning & Education goals to more closely match the "goal" language of the others (as opposed to "action" language)

- We need to carefully define and be consistent with terms in the plan, such as "resilience" and choosing either "actions" or "strategies"
- Recognition that the goal statements are short, and will need longer explanation and more nuance in a section of the plan
- o In that further explanation, we need to acknowledge that our goals make sense as they are consistent with other state goals and policies (this may become a factor in prioritizing strategies)
- We need to recognize and perhaps even pay for trade-offs specifically benefits of ecosystem services that we receive from farmers and large landowners. We will incorporate this idea in the objectives and strategies.
- We need to address monitoring and communication about our systems and policies. We will incorporate that idea in the objectives and strategies.

3. Hazard List and Profiles

- a. Update and Progress on Hazard List and Profiles
 - i. At the May Steering Committee meeting, the Committee approved VEM's recommendations for all hazards but two, which needed additional discussion: dam failure and sinkholes.
 - ii. Between May & July, VEM began pulling together hazard profiles (data and information about the frequency and impact of hazards in Vermont), and considering the best structure for addressing hazards in the plan.
 - iii. In the course of that work, VEM realized that it would make sense to "group" hazards into chapters for the purposes of addressing them in the plan. VEM proposed a revised list to the Steering Committee in July (see prep packet) that addresses dam failure under inundation flooding.

Steering Committee discussion & decisions on the revised hazard list:

- The Committee discussed the groupings at length, with many acknowledging that
 the groupings and list still feel confusing and imperfect. Specifically, Committee
 members questioned how to group or distinguish hazards with direct causal
 relationships (i.e. thunderstorms aren't hazards by themselves, but they may
 contain hail or lightning or cause flash flooding).
 - VEM acknowledged that this is an ongoing challenge and they have tried to regroup in many ways to address this problem, without finding a perfect solution.
 - VEM also acknowledged that this is a challenge beyond Vermont many states and even FEMA are continually shuffling the hazard list and groups. VEM felt it is most important to identify a final list that will make sense for the plan writing.
- The Committee agreed to finalize the grouped list as proposed by VEM. The Committee requested that "flash flood" be included under the "inundation flooding" group, and that "sinkholes" be addressed under fluvial erosion.
- NOTE: After the final section of the meeting, Hazard Ranking, some Committee
 members again expressed that they feel uncomfortable with the groups as is,
 having now worked with them in the prioritization process. VEM will follow up with
 individual Committee members to look again at the challenges and possibilities.

4. Hazard Ranking

a. Process overview

- Once identified, hazards must be ranked and prioritized for the plan. This is a step required by FEMA, and will likely influence how we prioritize and weight potential strategies in the plan. The final ranking will not directly influence funding decisions.
- ii. VEM has conducted research on how other states have ranked and prioritized hazards, and compared that against Vermont's 2013 process. VEM proposed a set of criteria for ranking Vermont's 2018 hazards.
- iii. Those who responded to the pre-meeting survey approved of the criteria and process, and also did an initial ranking of hazards for the purpose of later comparison.
- iv. VEM also began developing hazard profiles, which include background data on the frequency and extent of events associated with each hazard in Vermont; impact to people, the environment and economy; and geographic extent.

b. Initial Committee Ranking

- i. In the meeting, the Committee members broke up into small groups, with each group assigned five hazards to rank. The groups worked tested the ranking process by discussing and scoring each hazard based on the data and their knowledge.
- ii. The Committee reviewed all the combined scores and the resulting experimental ranking at the end, and then discussed how the ranking process and criteria worked.

Steering Committee discussion and reflections on the ranking process:

- The process was valuable and sometimes surprising, as they checked expectations or assumptions about hazards against the actual data.
- Many found that the criteria and ranking process was challenging and imperfect in several ways:
 - It was challenging to give hazards a single score for frequency or impact, since there is great variability in many of them (i.e. minor inundation flooding occurs every year somewhere in the state, but major floods have a very different impact and frequency).
 - Some hazards are distinct "events" (such as a tornado) while others occur in very different ways (such as the slow introduction and spread of an invasive species).
 - Many felt that we needed additional or improved data in hand to accurately rank the hazards on any criteria.
- The experimental results were very surprising, and most did not seem to feel that they reflected the real order of priority hazards in Vermont.
- VEM and CW will revisit the process and look at ways to improve the criteria and ranking to account for this input.

5. Next Steps

- a. Community Workshop and VEM will incorporate Steering Committee ideas into the working goals and objectives, and will synthesize their ideas about objectives for the Education & Outreach goal
- b. VEM will follow up individually with Committee members to look at the hazards and groupings

- c. VEM and Community Workshop will revise the ranking process to incorporate feedback and bring it back to the Steering Committee in September
- d. The Steering Committee will meet again in September; members are welcome and encouraged to join the Working Group meeting in August in conjunction with Resilient Vermont.