Resources

- **Staff contact list verify safety and coordinate recovery after a disaster**
  - maintain list of appropriate personnel and contact information

- **Clean-up effort resource list of contractors/vendors**
  - maintain list of preferred contractors for work that exceeds available resources

- **List local emergency responders and horticultural contacts (both in and outside of the region) to call for help/aid after an event.**
  - maintain list of contact information for volunteers and societies that may be impacted to inform them of closures for safety and repair schedules

Risks

- **Hazards**
  - Tornadoes, Severe Thunderstorms
  - Drought
  - High Winds
  - Ice Storms, big temperature swings from freezing to mid-70’s in 24 hours
  - Seasonal and flash flooding
  - Fire

- **Collections and/or plants of high value or worth**
  - *Rhododendron* (emphasis on native azaleas)
  - *Trillium*
  - Other collections: *Acer, Camellia, Cornus, Hexastylis, Hydrangea, Ilex, Lagerstroemia, Magnolia, Bulbs* (emphasis on *Crinum, Lycoris, and Narcissus*)

- **Prioritize Salvage**
  - Level 1
    - Federally Listed Species, State Listed Species, Candidates for listing
    - Rare plants from extirpated populations
  - Level 2
    - Rare plants
    - Unique hybrids
    - Charismatic focal plants
  - Level 3
    - Labeled Specimens
    - Plants of known provenance
  - Level 4
    - Unlabeled Specimens
    - Plants of unknown provenance
Mitigation Plan

- Back up plant records in multiple locations on an ongoing basis (external drive, cloud storage).
- Duplicate propagules for listed, rare, unique, and other accessioned plants of interest in on-site and off-site locations (i.e. private gardens and other public gardens).
- Reduce soil compaction damage by limiting access of heavy machinery.
- Keep about 10 yards of mulch on hand to minimize drought stress.
- Disaster preparation when storm is imminent:
  - Tornadoes, Severe Thunderstorms
    - Check calendar, cancel events, drop/break-down tents so they do not become a hazard.
    - Cut power to systems that may be damaged by lightning strike.
    - Push 1 gallon and smaller containers together to keep them from blowing around in nursery areas.
    - Power off computers.
  - Drought
    - Maintain mulch
    - Increase frequency of field checking for stressed plants
    - Adjust irrigation where present
  - High Winds
    - Check calendar, cancel events, drop/break-down tents so they do not become a hazard
    - Push 1 gallon and smaller containers together to keep them from blowing around in nursery areas
  - Ice storms and wildly fluctuating temperatures
    - Apply additional mulch to any marginal plants or recently installed, use floating row covers to protect exposed containers and nursery stock.
    - Use irrigation and hose bib cut-offs to prevent pipe damage.
  - Fire
    - Know location of fire extinguishers in every building (attach floorplans)
    - Be prepared to call 911 and/or contact Fire Dept 256-722-7120

Mitigation Plan

- After event:
  - First priority is making Garden safe for staff, volunteers, and visitors. Caution-tape off any areas deemed unsafe for entry until work can be done to make it safe. Communicate pathway and section closings to Visitor Services.
  - Before paths are cleared or heavy equipment brought in assess and document damage; and check for listed, rare, and unique plants important to the collection.
  - Use best pruning practices and other horticulturally appropriate triage measures on damaged plants.
  - Consider removal or renovation of level 4 plants.
  - Some specimens have back up plants at other gardens to avoid total loss of an accession. Replace dead specimens from these sources if possible.
Mitigation Plan Responsibilities

- Team-based responsibilities
  - [define teams of appropriate personnel and assign procedures to follow before and after event, this will differ depending on the structure of your staff and volunteers]
  - Director of Horticulture initiates disaster preparation before an imminent disaster.
  - Horticulture managers will be responsible for safeguarding the highest priorities.
  - Director or manager will be the first person back on scene.
  - Horticulture managers are the initial recovery group that will immediately document damage and assess safety of the damaged area before others (especially volunteers) are let back in.
  - Curators and Azalea Trail volunteers will assess the Azalea collection.
  - Curators and Trillium Collection volunteers will assess the Trillium collection.
  - Horticulture specialists and other available employees can assess the rest of the woody plant collection, structures, and facilities.

Implement the Plan and Monitor its Progress

- Write the plan
  - Keep it in a safe accessible place (shared drive).
- Interagency coordination
  - Agreements with local, regional and out-of-region organizations and businesses that could help the garden prepare or recover if necessary.
  - Contact local university extension offices, and county agencies to find regional disaster research and planning materials for horticulture/arboriculture.
- Updates (performed January each year)
  - Review staff contact lists and responsibility designations.
  - Account for priority plants that were acquired or died.
  - Have annual review during the same week every year so that it becomes routine.
    - Do a “walk through” with local emergency responders, and or horticultural contacts to build relationships during this week.
  - Test the plan and adjust accordingly.
  - Evaluate the effectiveness of the plan after a disaster event.
  - Communicate the disaster plan to new staff members.
Huntsville Botanical Garden
Natural Disaster Plan - Plant Collections Management
Reviewed January 2020

Date:

Event:

Preparations:

Effectiveness:

Disaster Assessment

Initial Damage report:

Safety Assessment:

Collections and Accessions assessments:

Structures and Exhibit assessments:

Salvage Priorities: