

Hurricane Preparation & Recovery Webinar: *Recovering from the Storm*

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SCHOOL OF FOREST,
FISHERIES, AND
GEOMATICS SCIENCES



UF IFAS Extension
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Hurricane Preparation & Recovery Webinar:

Recovering from the Storm

Please use the Q & A to ask questions, not the Chat.
Questions will be answered after the presentation is complete.

Webinar Evaluation and Materials

Please complete **the very short evaluation** at end of the webinar –

- <https://forms.office.com/r/Uh415kjuE4>

Presentation slides and other reading materials for this series are available online at:

<https://programs.ifas.ufl.edu/florida-land-steward/>

Find recordings, links, and materials for upcoming and past **Florida Land Steward Events and Webinars**.

“2023 Events and Webinars” → “Hurricane Preparation & Recovery Webinars”



FLORIDA LAND STEWARD

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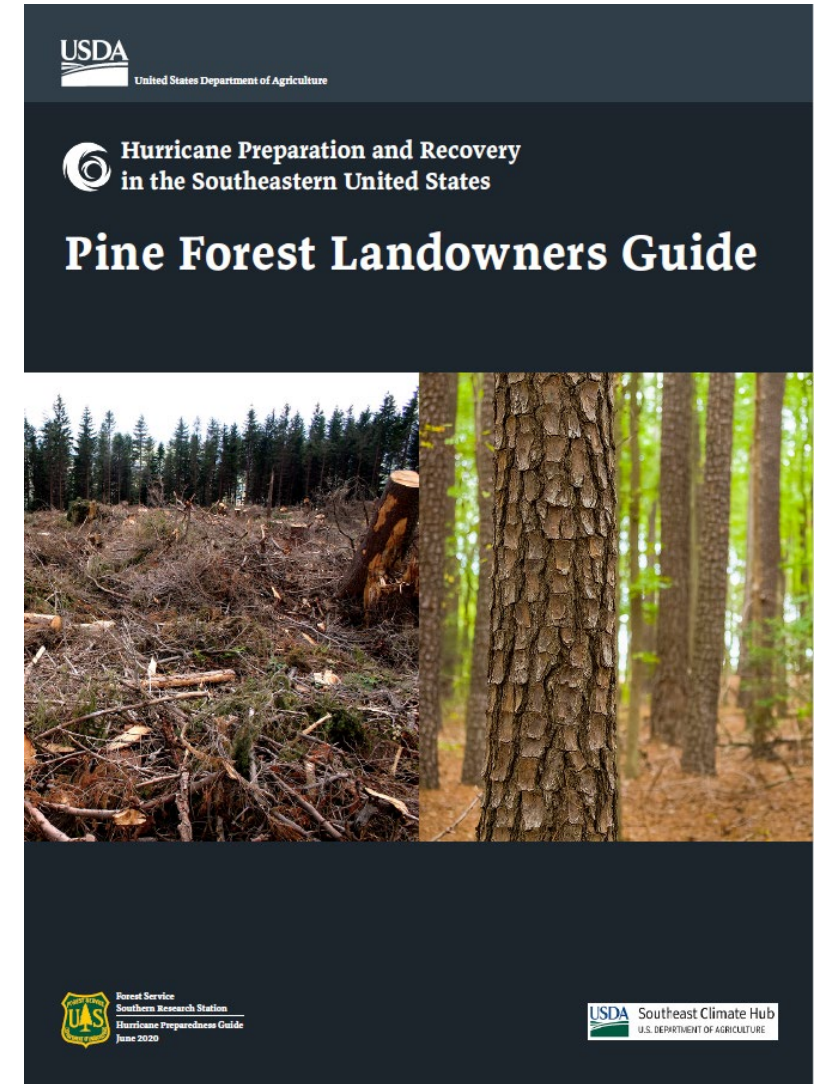
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Florida Land Steward Newsletter

SOURCES

- USDA Hurricane Preparation and Recovery in the Southeastern United States:
Pine Forest Landowners Guide
- **Prepare Your Forest Property for Hurricane Season,**
<https://edis.ifas.ufl.edu/publication/FR436>
- **Assessment and Management of Hurricane Damaged Timberland,**
<https://edis.ifas.ufl.edu/publication/fr154>
- Tips and feedback from the field



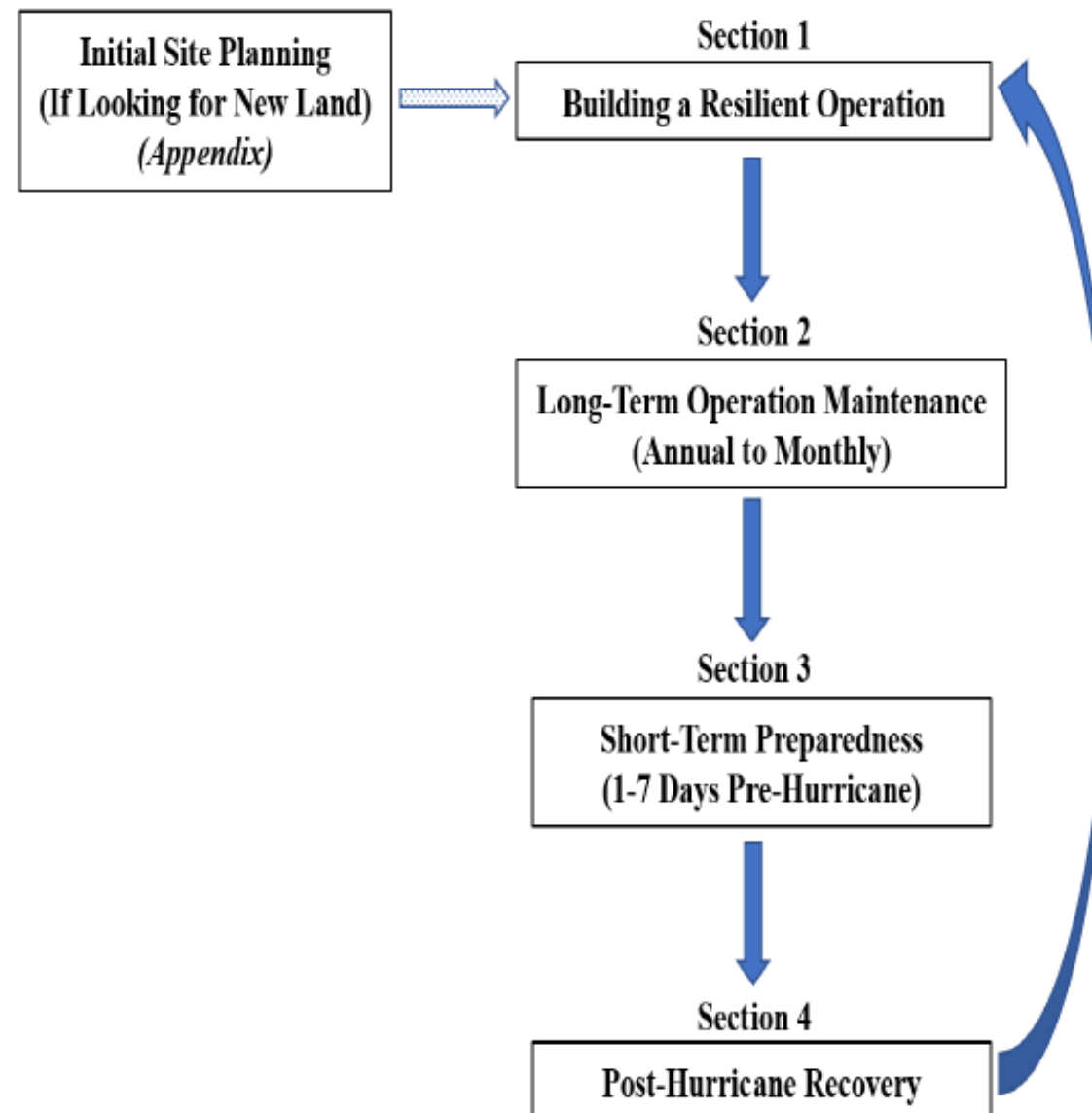


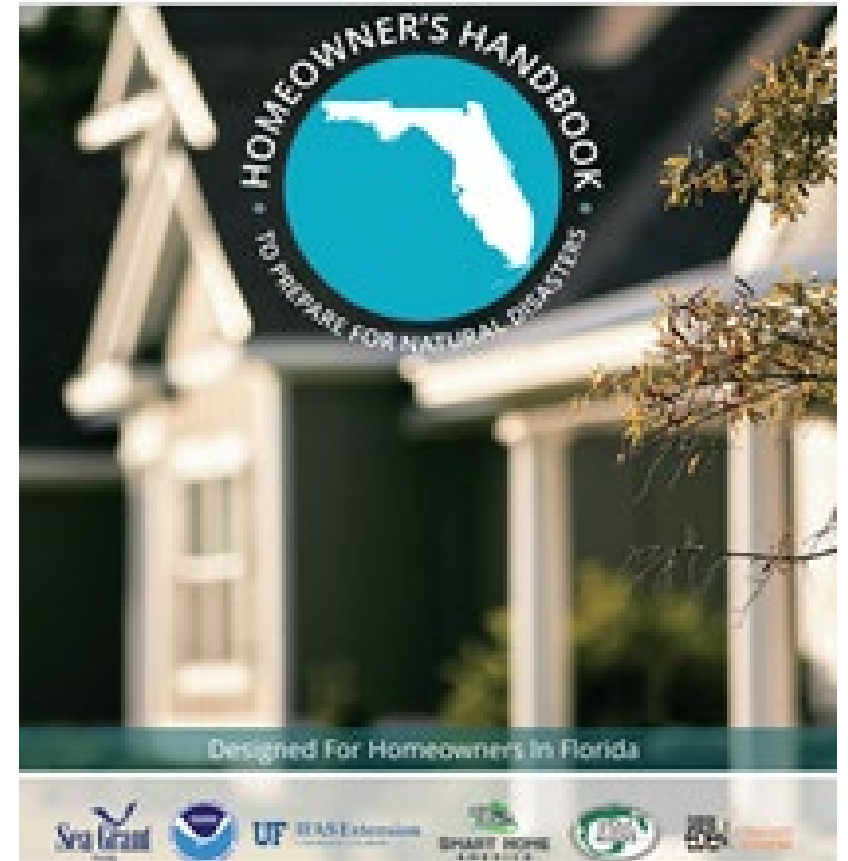
Figure 1. Flowchart for Pine Forest Landowners Guide

POST-STORM RECOVERY TO DO WITHIN A WEEK OF THE STORM

WITHIN A WEEK – PROTECT YOU AND YOUR FAMILY FIRST

Have your essentials in place

- UF/IFAS Disaster Preparation and Recovery site and handbook
<https://disaster.ifas.ufl.edu/>
- Make sure you are safe
- Stay tuned to emergency information and alerts
- Supplies for at least 72 hours



WITHIN A WEEK - INITIAL ASSESSMENT

- **Take a look around**

- When it is safe to do so, walk or ride property boundaries and roads to assess the damage to timber, roads, fences, gates, and stream crossings.
- **Use caution** when driving on forest sites impacted by hurricanes, as roads may be washed out and trees may be down.
- Stay away from down power lines.
- Check culverts and stream crossings prior to driving across them.



WITHIN A WEEK - DOCUMENT THE DAMAGE

- **Photos and video**

- Take photos and/or video first - before beginning any cleanup or repairs.
- Photograph damaged timber, facilities and property.
- Include written notes describing what is in the pictures and where they were taken.
- If possible, sketch areas of damaged timber and property on an aerial photograph of your property.



DOCUMENT THE DAMAGE

- **Photos and video**

- This “after” documentation will be used with your pre-hurricane “before” documentation to clearly show your losses.
- Disaster assistance programs will become available after a major storm, perhaps even months to years later in some cases.
- For some programs an operation may only receive assistance for damage that was documented.
- It’s a good time to get your inventory handy if you have it.

WITHIN A WEEK – MAKE CONTACTS

- **Assistance and recovery contacts:**
 - Have your FSA farm paperwork filled out?
 - Call your local USDA Farm Service Agency (FSA) Office to inquire about available assistance programs, application procedures, and deadlines - <https://offices.sc.egov.usda.gov/locator/app>
- Check in with your local Cooperative Extension office and Florida Forest Service to see what other assistance may be available following the storm.

MAKE CONTACTS

- **Online resources:**

- Check the USDA's Disaster Resource Center to see what programs are available:

<https://www.usda.gov/topics/disaster-resource-center/>

- Use the **5-step Disaster Assistance Discovery Tool** to learn which USDA disaster assistance programs are available to assist you:

<https://www.farmers.gov/recover/disaster-tool>

MAKE CONTACTS

- **USDA Disaster Assistance Program Examples:**
 - **Emergency Forest Restoration Program (EFRP)** - FSA program provides funding for restoring land damaged by a natural disaster
 - **Emergency Watershed Protection (EWP)** - NRCS program provides financial and technical assistance to quickly address serious and long-lasting damage to infrastructure and the land
 - **Floodplain Easement Program (EWP-FPE)** - NRCS program option for converting land to permanent easements for the purpose of improving floodplain management and reducing the threat of flooding
 - **Environmental Quality Incentives Program (EQIP)** - Year-round NRCS rehabilitation program with funding authority to provide financial assistance to repair and prevent excessive soil erosion caused or impacted by natural disasters

WITHIN A WEEK - INSURANCE CLAIMS

Get the paperwork started, continue assessment and documentation

- Begin the claims process as soon as possible. Accurate losses of inventory and equipment may not be fully documented yet, but insurance claims can take months to resolve following hurricane events so start the paperwork now.

TO DO WITHIN A MONTH OF THE STORM

WITHIN A MONTH – TRIAGE TIME

ASSESSMENT OF DAMAGE TO FOREST LAND

- **Inventories and documentation**
 - Following your initial assessment of infrastructure and areas of timber damage, work with your forester to conduct a thorough examination of the timber by sampling plots within the stands to estimate the amount and severity of damage.
 - This assessment will be used to determine salvage value of forest stands and follow-up management needs such as salvage thinning, full clearcut and replant, pre-commercial thinning, etc., and should be based on the long-term goals and objectives, and economic feasibility.

TIMBER DAMAGE ASSESSMENT

- **Minor bending / leaning**
 - **Prognosis:** trees in this category can naturally recover and are not a priority for immediate salvage.
- **Minor wounds**
 - **Prognosis:** trees with minor wounds (less than 1 sqft) will often recover naturally are not a priority for immediate salvage.
 - **Recommended action:** None



TIMBER DAMAGE ASSESSMENT

- **Broken tops with most of crown intact**
 - **Prognosis:** If these trees are reasonably straight and free from severe crown loss, they will likely survive and can be retained in the stand
 - **Recommended action:** Closely monitor for signs of insects that target stressed and damaged trees.



TIMBER DAMAGE ASSESSMENT

- **Uprooted trees**

- **Prognosis:** If not severely bent or broken these trees are less likely to have severe damage to wood and generally can be salvaged. However, if in solid wood product size class, they are susceptible to insects and fungi that can degrade wood quality so remove in 4-6 weeks.
- **Recommended action:** Local timber markets may be flooded with lumber after a hurricane. If salvage price is reasonable remove them. Otherwise monitor the stand for insect and disease outbreaks originating from the uprooted trees.



TIMBER DAMAGE ASSESSMENT

- **Severely bent or snapped main stems and/or severe broken tops**
 - **Prognosis:** these trees have internal wood damage and can only be sold as pulpwood, mulch, or firewood.
 - **Recommended action:** Remove / harvest when possible but not high priority in terms of value.



TIMBER DAMAGE ASSESSMENT

- **Major wounds**
 - **Prognosis:** trees with wounds are greater than 1 sqft in size are prime targets for insects, which can threaten remaining trees.
 - **Recommended action:** Harvest as soon as possible. Prioritize high value stems.



PRIORITIZE HARVESTING

- Estimate the percentage of trees that are in each of the classifications and prioritize harvests:
 - **Lightly damaged stands** may not need salvage and can be left alone if they are likely to recover over time.
 - For **moderately damaged stands**, you may need to decide between a partial or complete harvest based on damage level and distribution.
 - **Severe or catastrophic damage** will require a salvage operation to recoup any value that can be recovered from the stand. This would likely mean a complete harvest.



PRIORITIZE HARVESTING

- Trees of higher value should be considered for removal first.
 - Sawtimber, poles, plylogs/veneer should be removed first - **within 4 to 6 weeks** before blue stain fungus sets in.
 - Pulpwood can be removed within 8 to 12 months



REPLANTING

- If / when necessary to replant, choose the species that is the best fit for your site and objectives.
- Do proper site preparation. After hurricanes, wildfires and invasive species are of particular concern due to increased fuel loads and site disturbance. Often a combination of prescribed burning and herbicide treatments may be needed.
- Here we circle **back to building a resilient operation.**

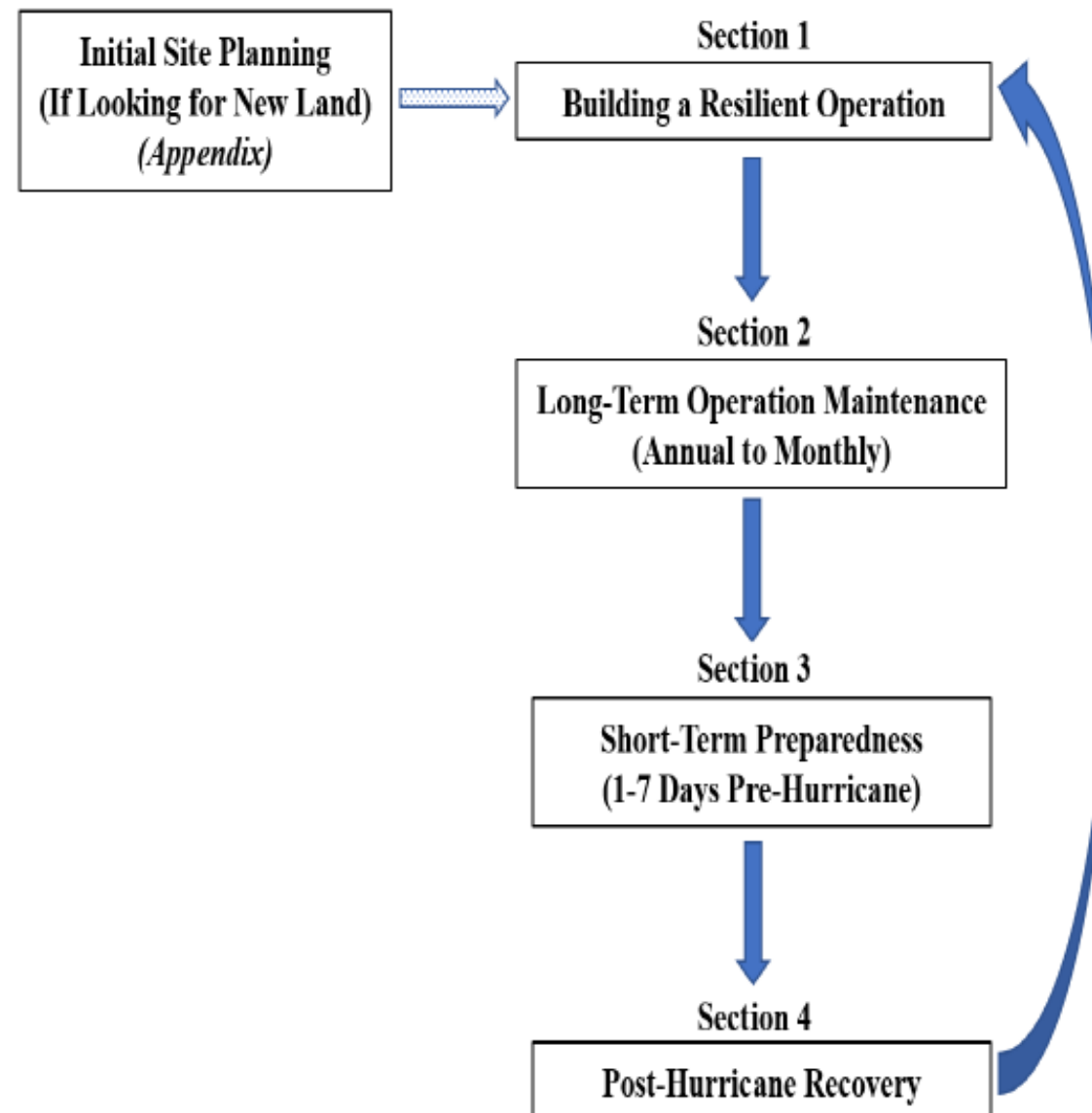


Figure 1. Flowchart for Pine Forest Landowners Guide

CONNECT WITH PROFESSIONALS

Consulting Forester

- **Assistance in all phases of management**
 - Management plan preparation, inventory, planting, site prep, nutrition, prescribed burning, thinning, marketing timber
- UF/IFAS pub on Selecting a Consultant - <https://edis.ifas.ufl.edu/fr125>



CONNECT WITH PROFESSIONALS

- Florida Forest Service County Forester
- Florida Forest Service BMP Forester – roads and drainage, stream crossings, wetland protection, etc.
- UF/IFAS County Extension Agent (Ag/Natural Resources Agent)
- Florida Fish and Wildlife Commission Landowner Assistance Program Biologist
- USDA Natural Resources Conservation Service District Conservationist
- USDA Farm Service Agency Agent
 - ****You can get your forms filled out ahead of time!**



CONNECT WITH PROFESSIONALS

- **USDA Farm Service Agency**

- Complete your farm records ahead of time!
 - Don't wait until after a disaster to get your paperwork done – avoid application backlog!
 - EFRP application backlog after Hurricane Michael – still not caught up 3 years after that storm
 - You'll receive E-notifications about recovery programs from FSA after the storm
- Already have farm records in?
 - Review and make sure they are complete and up-to-date

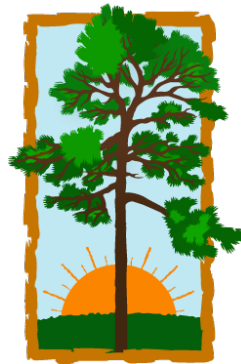
- <https://www.farmers.gov/connect>



CONNECT WITH PROFESSIONALS

Local Timber Industry

- Florida Forestry Association
<http://floridaforest.org/>



**FLORIDA
FORESTRY
ASSOCIATION**



CONNECT WITH PROFESSIONALS

Get Certified!

- American Tree Farm System
<https://www.treefarmssystem.org/>
- Florida Tree Farm Program
<https://www.treefarmssystem.org/florida>



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THANKS PARTNERS AND SUPPORTERS!



**United States
Department of
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**KEEP YOUR EYE ON THE TROPICS
AND THANKS FOR JOINING US!**

