

Essex & Prentiss Woods Forest Management Plans

Sophia Cameron & Ben Arruda



Forest Management Plan (FMP) Development Process

01

Provide safe recreational opportunities for the Citizens of Bangor

02

Improve tree quality and forest health

03

Protect local waters, cultural artifacts, and wildlife habitats

04

Demonstrate good forest management

05

Provide educational opportunities

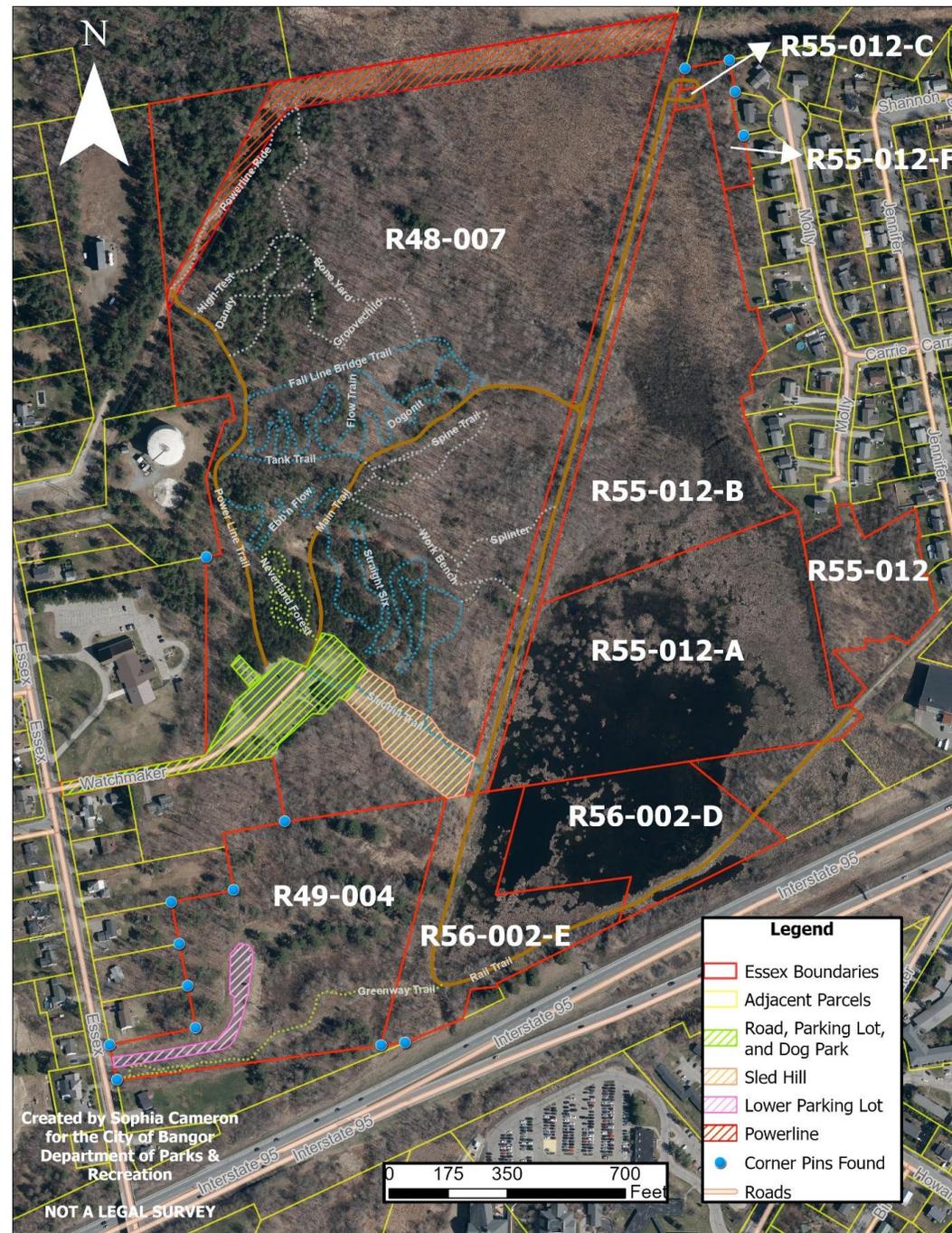
06

Improve access for recreation and management

Landowner Objectives 2026-2036

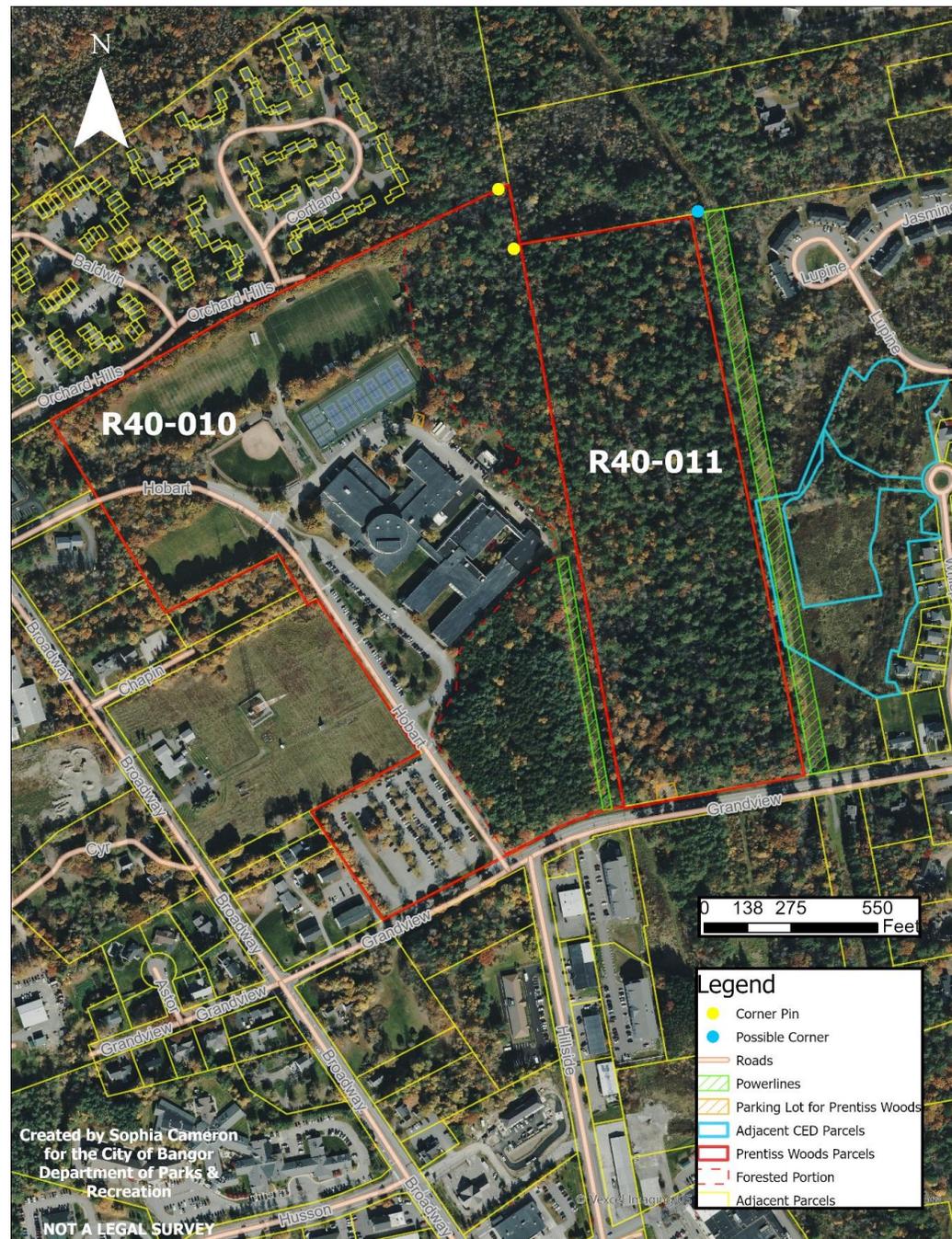
Essex Woods

(+/- 113 acres)



Prentiss Woods

(+/- 40 acres)



Essex Woods Recreation Recommendations

- ▶ Trail plan being completed by the Outdoor Sports Institute- will be included as an Appendix
- ▶ Promote Essex as a birding destination in the state
 - ▶ Remove trash, especially along the wetland edge
 - ▶ Establish control of the water level by locating and checking the outflow culvert
 - ▶ Establish nest-box program for cavity nesting waterfowl
 - ▶ Establish blue bird nesting platforms
 - ▶ Establish Canada Goose nesting platforms
 - ▶ Maintain American woodcock singing ground sites (early successional habitat)
 - ▶ Build interpretive stations/add educational signage
 - ▶ Create an “insect buffet” using native herbaceous plantings

Common Name	Scientific Name	Protection Category	Nesting or Migratory?	Habitat
Least Bittern	<i>Ixobrychus exilis</i>	Endangered	Nesting	Freshwater & Brackish Wetlands
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Endangered	Migratory	Wetlands
American Pipit	<i>Anthus rubescens</i>	Endangered	Migratory	Tundra
Blackpoll Warbler	<i>Setophaga striata</i>	Threatened	Migratory	Boreal Forest
Bank Swallow	<i>Riparia riparia</i>	Threatened	Nesting	Lakes & Ponds
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	Threatened	Nesting	Lakes & Ponds

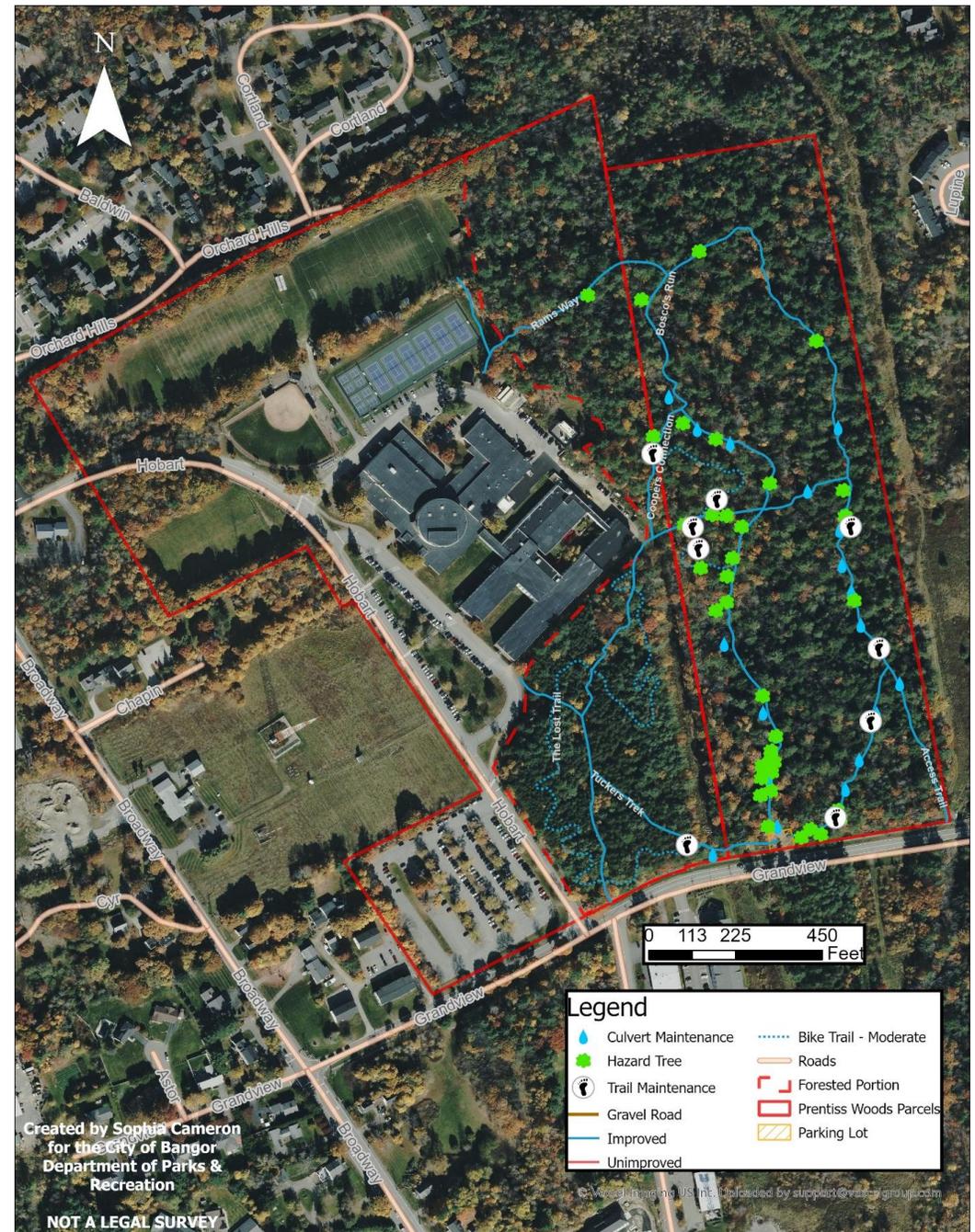
Essex Woods Recreation Recommendations (cont.)

- ▶ Police Athletic League Building- roof and overhang appear to need maintenance/repairs, seek quote for repairs or determine if this space could be better used and maintained by others
- ▶ Groom main trails for cross-country skiing- purchase a drag and a snowmobile for this purpose and to groom trails in the City Forest
- ▶ Continue to maintain sliding hill according to DEP Maintenance Requirements for Closed Municipal Landfills



Prentiss Woods Recreation Recommendations

- ▶ Add doggy bag stations and ensure maintenance of trash receptacles at each trail head to accommodate dog walkers
- ▶ Restore access to smaller trails that have been underutilized and grown over
- ▶ Repair or replace informational kiosks at trailheads
- ▶ Remove hazard trees identified and marked along trails, including those in active decline from beech leaf disease—most have been marked with orange tree paint and mapped
- ▶ Add fill in areas that have washed out or identified as a trip hazard on the map
- ▶ Replace or reset culverts that have been identified as needing attention to protect trails from washout



Essex Woods Forest Health

Recommendations

- ▶ Remove and maintain invasive plant populations
 - ▶ Japanese knotweed (*Fallopia japonica*)
 - ▶ Asiatic bittersweet (*Celastrus orbiculatus*)
 - ▶ Glossy buckthorn (*Frangula alnus*)
 - ▶ Common buckthorn (*Rhamnus cathartica*)
 - ▶ Multiflora rose (*Rosa multiflora*)
 - ▶ Black locust (*Robinia pseudoacacia*)
 - ▶ Norway maple (*Acer plantanoides*)
 - ▶ Japanese barberry (*Berberis thunbergii*)
 - ▶ Ornamental grapevine (*Vitis vinifera*)
 - ▶ Japanese honeysuckle (*Lonicera japonica*)
 - ▶ Garlic mustard (*Alliaria petiolata*)

- ▶ Proactively monitor and manage for invasive insects and pathogens
 - ▶ Beech bark disease
 - ▶ Beech leaf disease
 - ▶ Red pine scale
 - ▶ Hemlock woolly adelgid

- ▶ Remediate soil erosion



Prentiss Woods Forest Health Recommendations

▶ Remove and maintain invasive plant populations

- ▶ Asiatic bittersweet (*Celastrus orbiculatus*)
- ▶ Japanese honeysuckle (*Lonicera japonica*)
- ▶ Glossy buckthorn (*Frangula alnus*)
- ▶ Common buckthorn (*Rhamnus cathartica*)
- ▶ Norway maple (*Acer plantanoides*)

▶ Ring shake and windthrow Stand 2

- ▶ Previous harvesting opened-up the stand
- ▶ Typically, windthrow is a helpful natural disturbance regime that creates gaps to allow regeneration to grow
- ▶ Creates a dangerous situation in areas of high recreational use

▶ Proactively monitor and manage for invasive insects and pathogens

- ▶ Beech bark disease
- ▶ Beech leaf disease
- ▶ **Red pine scale**
- ▶ Hemlock woolly adelgid
- ▶ Emerald ash borer



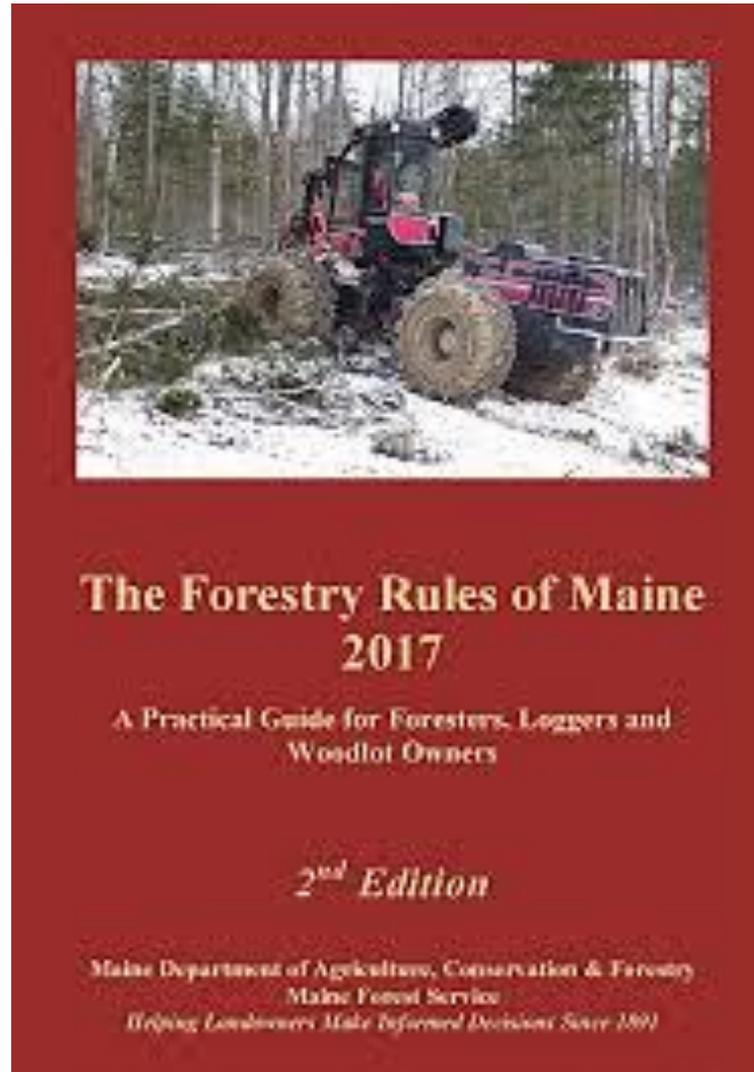
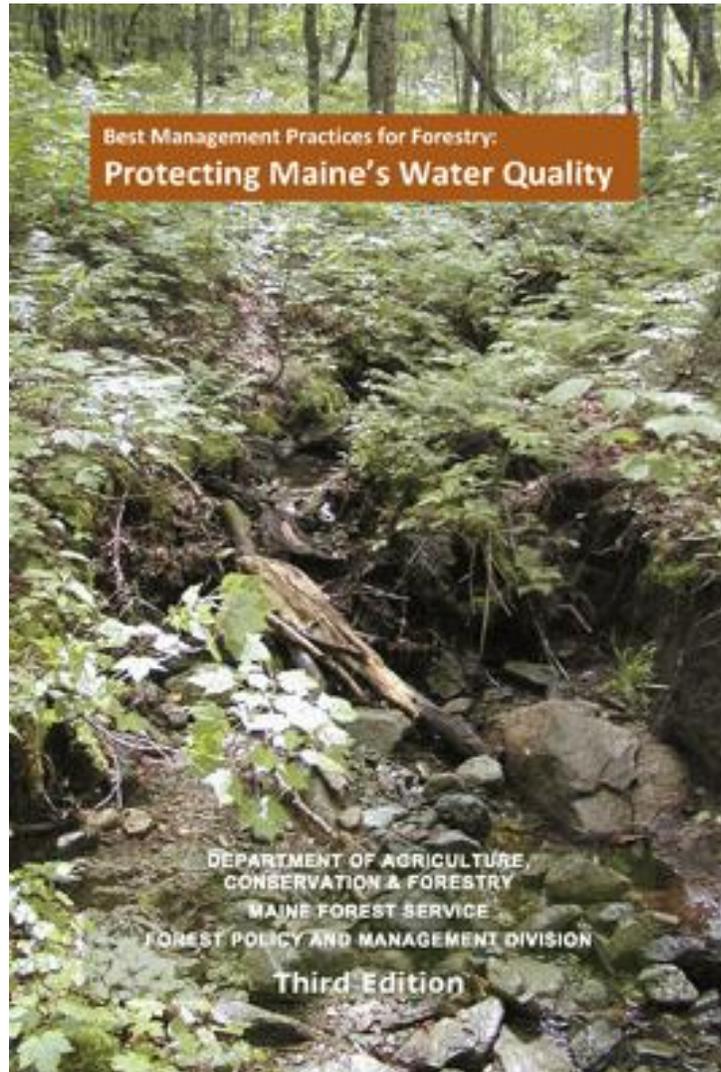
Essex Woods Wildlife Recommendations

- ▶ Maintain hard masting tree species populations that are viable into the future (red and burr oak)
- ▶ Plant soft-masting species in areas where regeneration is not adequate
- ▶ Continue to monitor for beaver to ensure that water levels in the wetland remain consistent
- ▶ Maintain early successional habitat through the maintenance of existing forest gaps
- ▶ Improve bird habitat through the creation of snags, creating nesting boxes for various species, planting herbaceous plants to attract insects
 - ▶ Continued discussion with Ag Allies, IF&W, Maine Audubon, and DEP

Prentiss Woods Wildlife Recommendations

- ▶ Retain snags and downed woody debris wherever possible
- ▶ Plant trees in areas where tree loss may be inevitable (specifically in areas heavy to hemlock) to maintain shade
- ▶ Remain incredibly conscious of vernal pools present and how management and recreational use impact them
 - ▶ Consult with IF&W amphibian biologists to map exact locations and determine how to rehabilitate these important habitats

Demonstrating Good Forest Management



Providing Educational Opportunities

- ▶ Forestry Field Tours
- ▶ Informational signage
- ▶ Increased interaction with school groups
- ▶ Volunteer-based nature and wildlife walks



Improving Access in Essex Woods

Created by Sophia Cameron
for the City of Bangor
Department of Parks &
Recreation

NOT A LEGAL SURVEY

Legend	
✕ AccessPoints Bike Trail - Easy
— Roads Bike Trail - Moderate
— Gravel Road Bike Trail - Difficult
— Improved	▭ Essex Boundaries
— Unimproved	

Improving Access in Prentiss Woods



Questions?

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