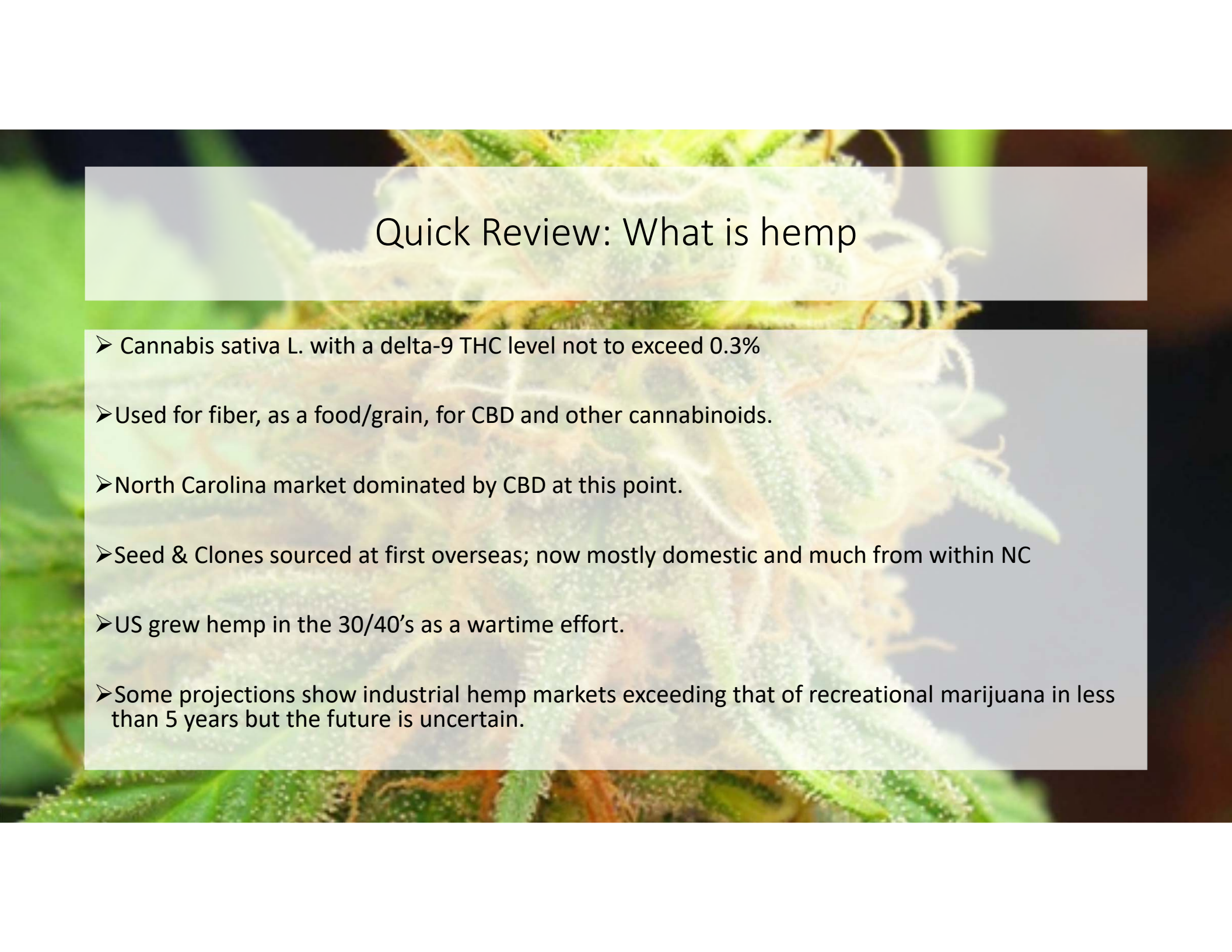


Industrial Hemp in North Carolina



Steve Troxler, Commissioner of Agriculture
North Carolina Department of Agriculture & Consumer Services



Quick Review: What is hemp

- Cannabis sativa L. with a delta-9 THC level not to exceed 0.3%
- Used for fiber, as a food/grain, for CBD and other cannabinoids.
- North Carolina market dominated by CBD at this point.
- Seed & Clones sourced at first overseas; now mostly domestic and much from within NC
- US grew hemp in the 30/40's as a wartime effort.
- Some projections show industrial hemp markets exceeding that of recreational marijuana in less than 5 years but the future is uncertain.

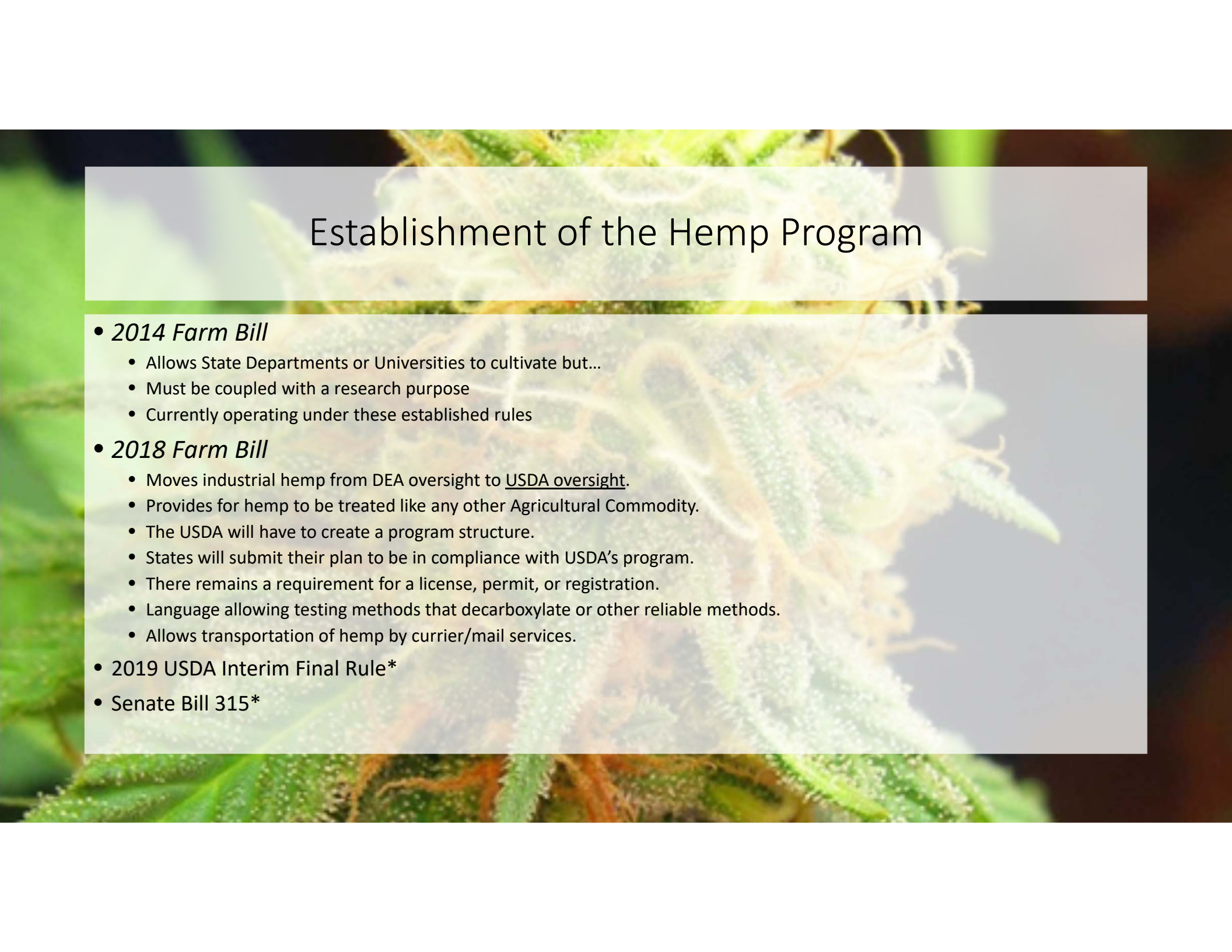
Quick Review: Role of NCDA & NCSU

➤ NCDA:

- Review applications
- Make amendments
- Outreach
- Compliance Testing
- Register Processors
- Soil Testing
- Agronomists
- Other

➤ NCSU

- PDIC
- Outreach
- Extension
- Consumer Services



Establishment of the Hemp Program

- **2014 Farm Bill**

- Allows State Departments or Universities to cultivate but...
- Must be coupled with a research purpose
- Currently operating under these established rules

- **2018 Farm Bill**

- Moves industrial hemp from DEA oversight to USDA oversight.
- Provides for hemp to be treated like any other Agricultural Commodity.
- The USDA will have to create a program structure.
- States will submit their plan to be in compliance with USDA's program.
- There remains a requirement for a license, permit, or registration.
- Language allowing testing methods that decarboxylate or other reliable methods.
- Allows transportation of hemp by currier/mail services.

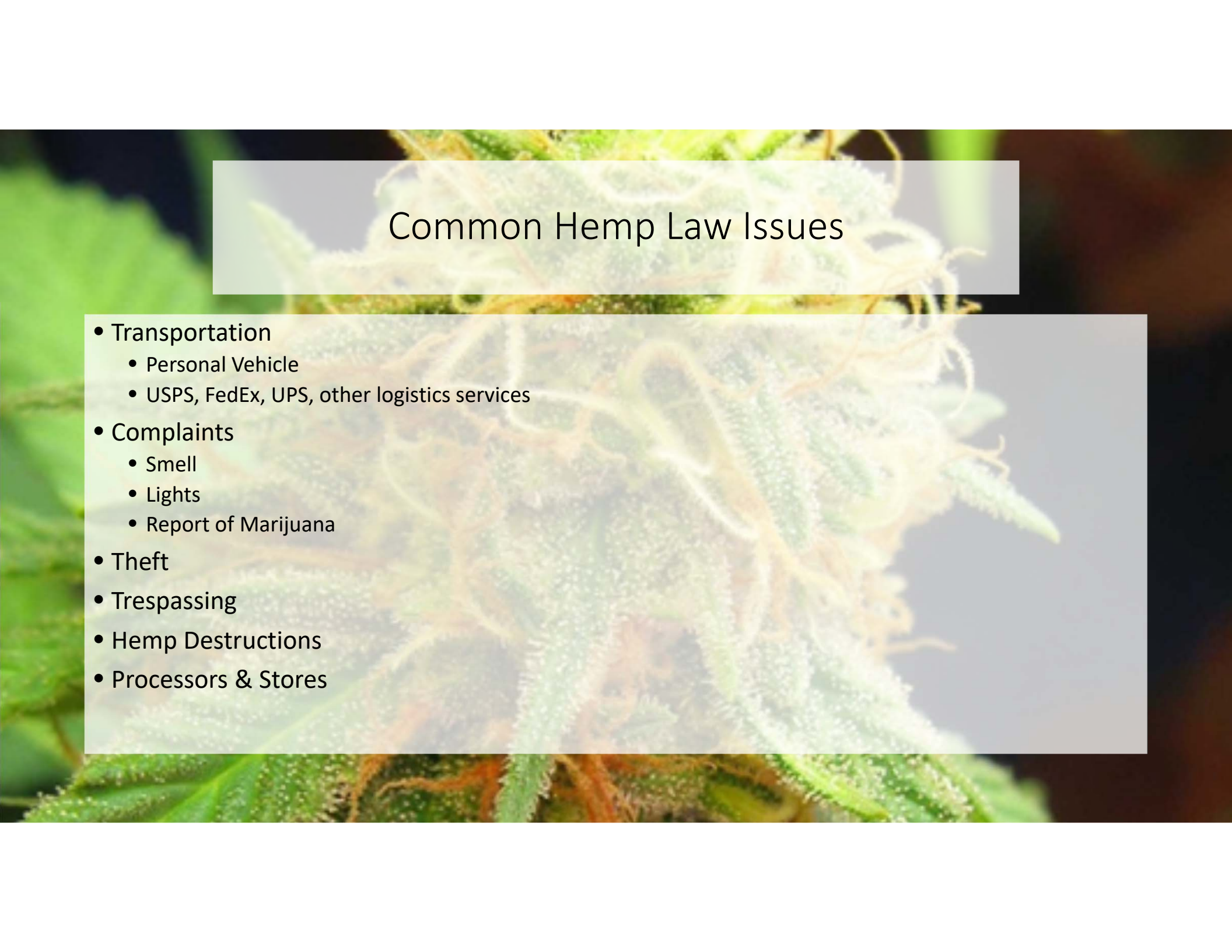
- **2019 USDA Interim Final Rule***

- **Senate Bill 315***



Industrial Hemp & Law

- Legally bound to follow the rules set forth in the statutes.
- Violations of your license can result in civil or criminal penalty
- Required to disclose all locations for growing and storage
- Required to control volunteers
- Required to update the NCDA
- Required to disclose criminal convictions
- Felonies can prohibit involvement in program
- NCDA & LEO allowed on premises without warning.
- Legally must qualify as a farmer through tax documentation
- Required to alert us at flower initiation for testing.



Common Hemp Law Issues

- **Transportation**
 - Personal Vehicle
 - USPS, FedEx, UPS, other logistics services
- **Complaints**
 - Smell
 - Lights
 - Report of Marijuana
- **Theft**
- **Trespassing**
- **Hemp Destructions**
- **Processors & Stores**




Consumer Needs

➤ Likely questions include:

- How do I get a license
- How do I amend my license
- How do I schedule testing
- Where can I find more information
- Where do I sell my hemp

➤ Basic resources:

- www.ncagr.gov/hemp/
- <https://industrialhemp.ces.ncsu.edu>
- industrialhemprequests@ncagr.gov



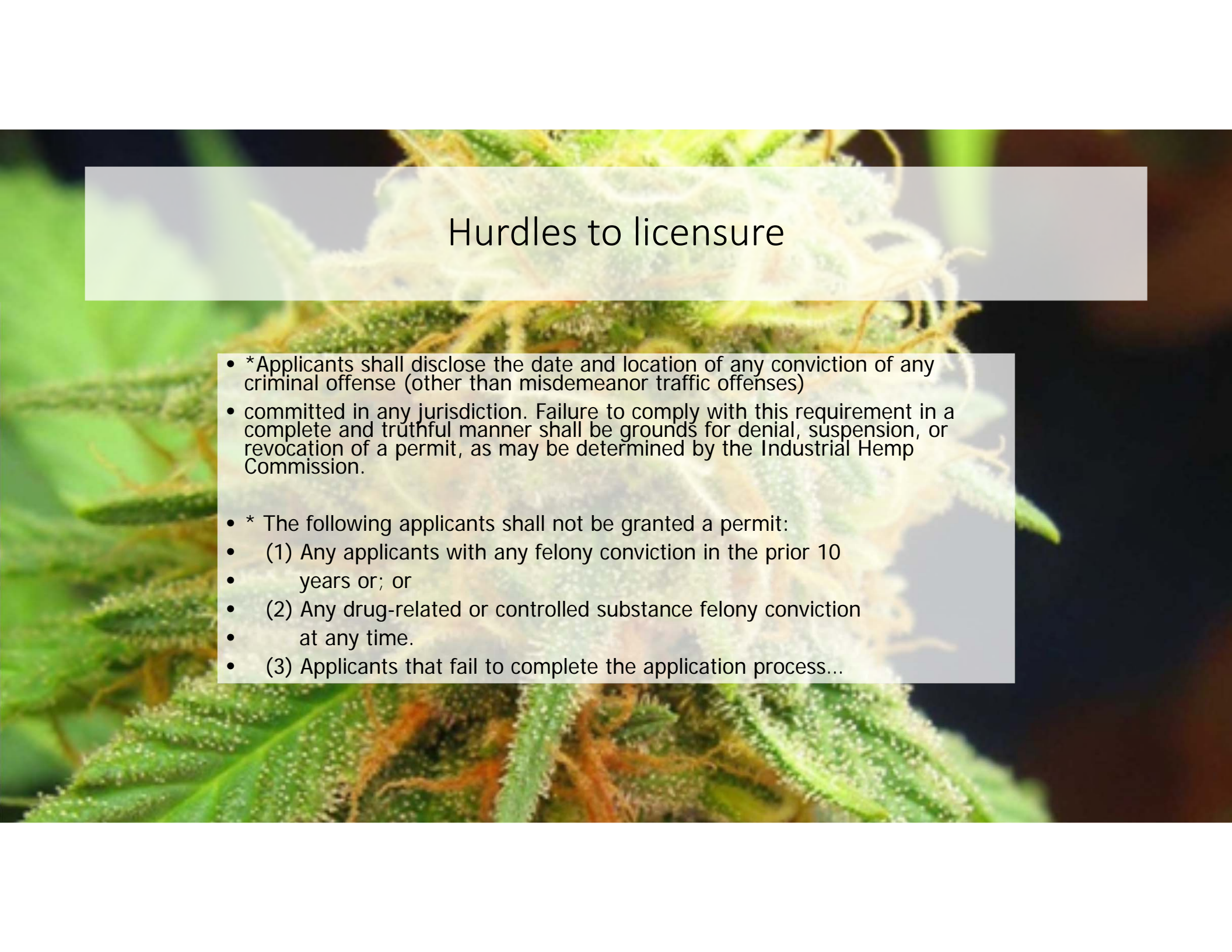
What's on the Web?

➤ NCSU Website:

- Application
- Rules
- Processor Registration
- FAQ's
- Sample Request & Other Forms

➤ NCSU Website:

- Clone/seed sources (not vetted)
- Growing & other tips
- Hemp Connections
- Meeting Announcement & Periodic Articles



Hurdles to licensure

- * Applicants shall disclose the date and location of any conviction of any criminal offense (other than misdemeanor traffic offenses)
- committed in any jurisdiction. Failure to comply with this requirement in a complete and truthful manner shall be grounds for denial, suspension, or revocation of a permit, as may be determined by the Industrial Hemp Commission.
- * The following applicants shall not be granted a permit:
 - (1) Any applicants with any felony conviction in the prior 10 years or; or
 - (2) Any drug-related or controlled substance felony conviction at any time.
 - (3) Applicants that fail to complete the application process...

2021

North Carolina Industrial Hemp Commission
Thomas Melton, Chair of the Commission
License Document

Application ID

NOT TRANSFERABLE
Statute 106-50

LICENSE TYPE:	Industrial Hemp - Research With Intent to Market
DURATION:	Three Years
EXPIRATION DATE:	06/25/2021
ISSUE DATE:	06/25/2018

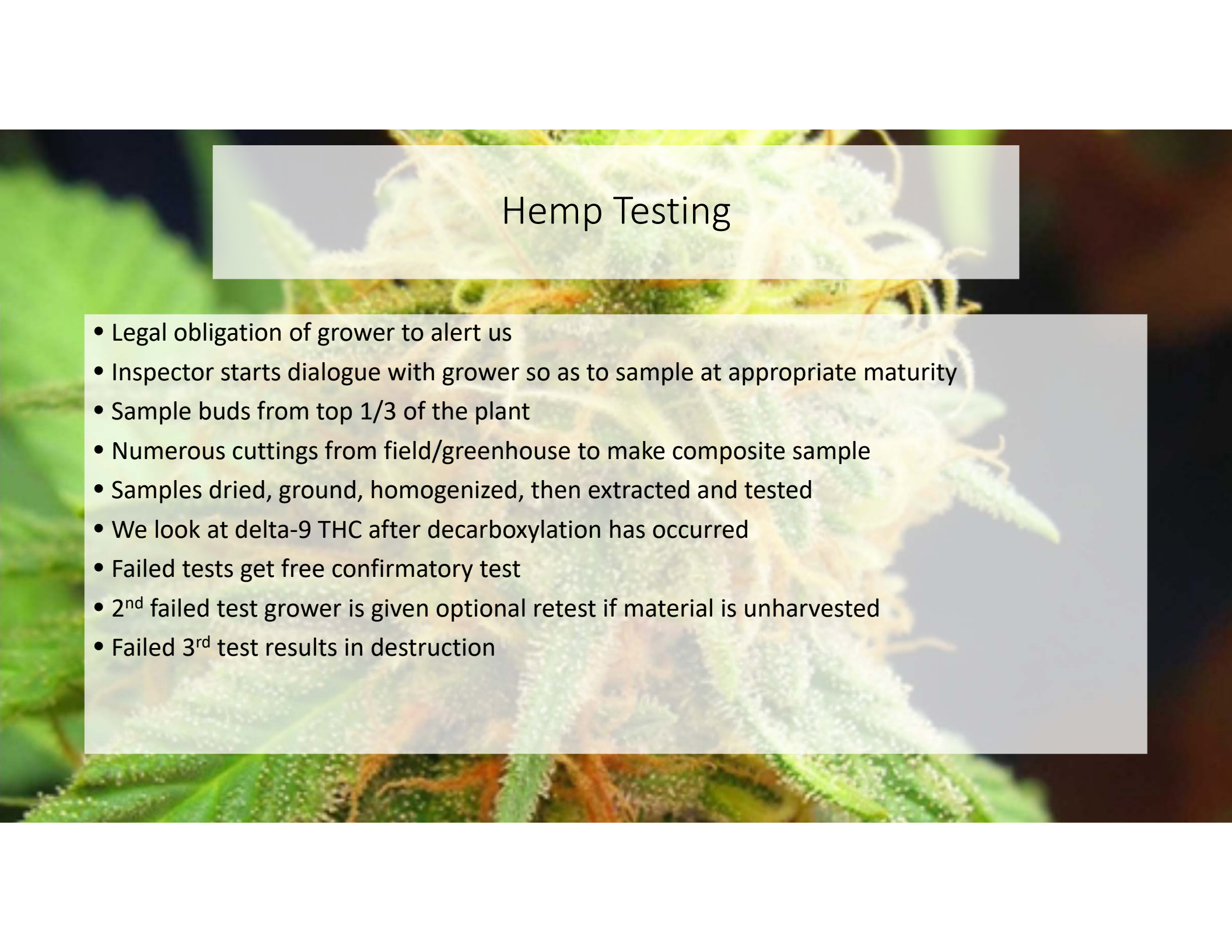
LICENSEE
OR
CERTIFICATOR



THIS LICENSE MAY BE SUBJECT TO REVOCATION OR SUSPENSION AS PROVIDED BY LAW

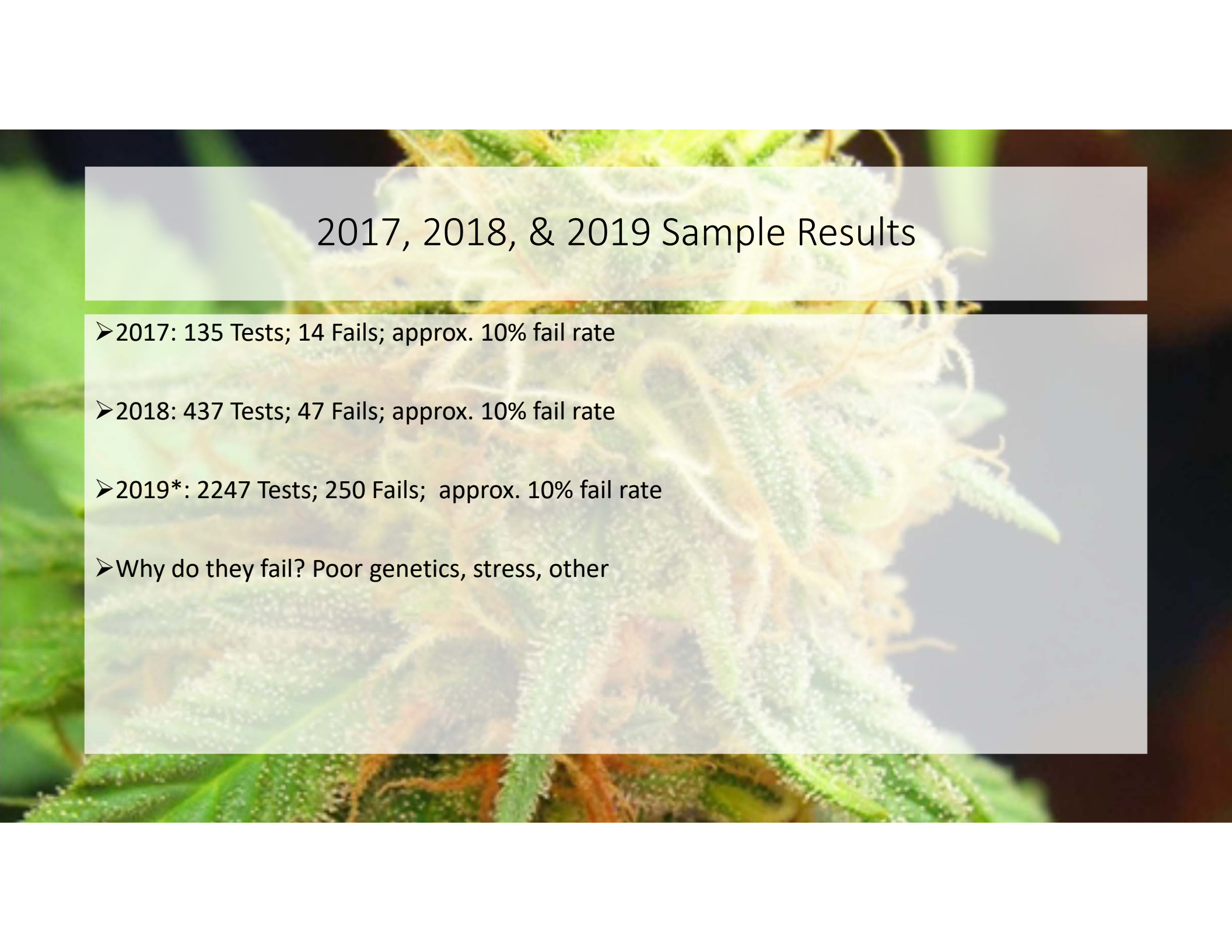
A handwritten signature in black ink that reads "Thomas A. Melton".

Thomas Melton, Chair of the Commission

A close-up photograph of hemp buds, showing the intricate structure of the trichomes and the green, fuzzy texture of the plant. The buds are the central focus, with some green leaves visible in the background.

Hemp Testing

- Legal obligation of grower to alert us
- Inspector starts dialogue with grower so as to sample at appropriate maturity
- Sample buds from top 1/3 of the plant
- Numerous cuttings from field/greenhouse to make composite sample
- Samples dried, ground, homogenized, then extracted and tested
- We look at delta-9 THC after decarboxylation has occurred
- Failed tests get free confirmatory test
- 2nd failed test grower is given optional retest if material is unharvested
- Failed 3rd test results in destruction

A close-up photograph of a cannabis flower, showing the intricate structure of the trichomes and bracts. The flower is green with some brownish-orange hues. A semi-transparent grey text box is overlaid on the image, containing the title and a list of statistics.


2017, 2018, & 2019 Sample Results

- 2017: 135 Tests; 14 Fails; approx. 10% fail rate
- 2018: 437 Tests; 47 Fails; approx. 10% fail rate
- 2019*: 2247 Tests; 250 Fails; approx. 10% fail rate
- Why do they fail? Poor genetics, stress, other



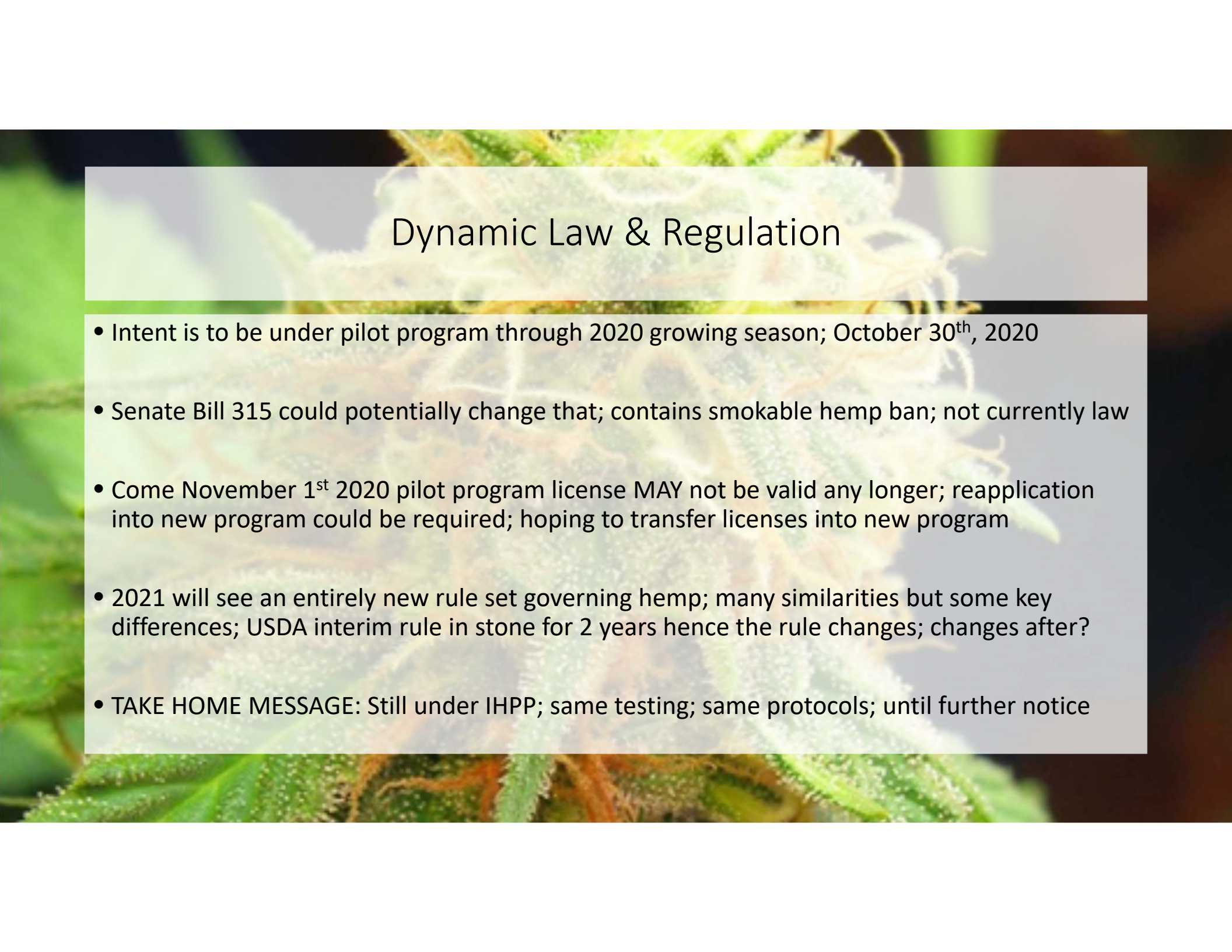
Steve Troxler, Commissioner of Agriculture
North Carolina Department of Agriculture & Consumer Services





Risks in the Hemp Industry

- Growing hemp is expensive and labor intensive.
- Hemp genetics do not have the years of testing that other crops have, especially in our climate.
- Hemp has insect pests, gets disease, and doesn't like wet feet.
- If you fail your THC compliance tests your crop will be destroyed.
- If your crop is healthy and passes testing, your end product may not be marketable if THC content goes high after State testing or due to pesticide/heavy metal residues, or other factors.
- Hemp can be difficult to dry especially in regards to eliminating/preventing mold issues.
- Dynamic law & regulation base



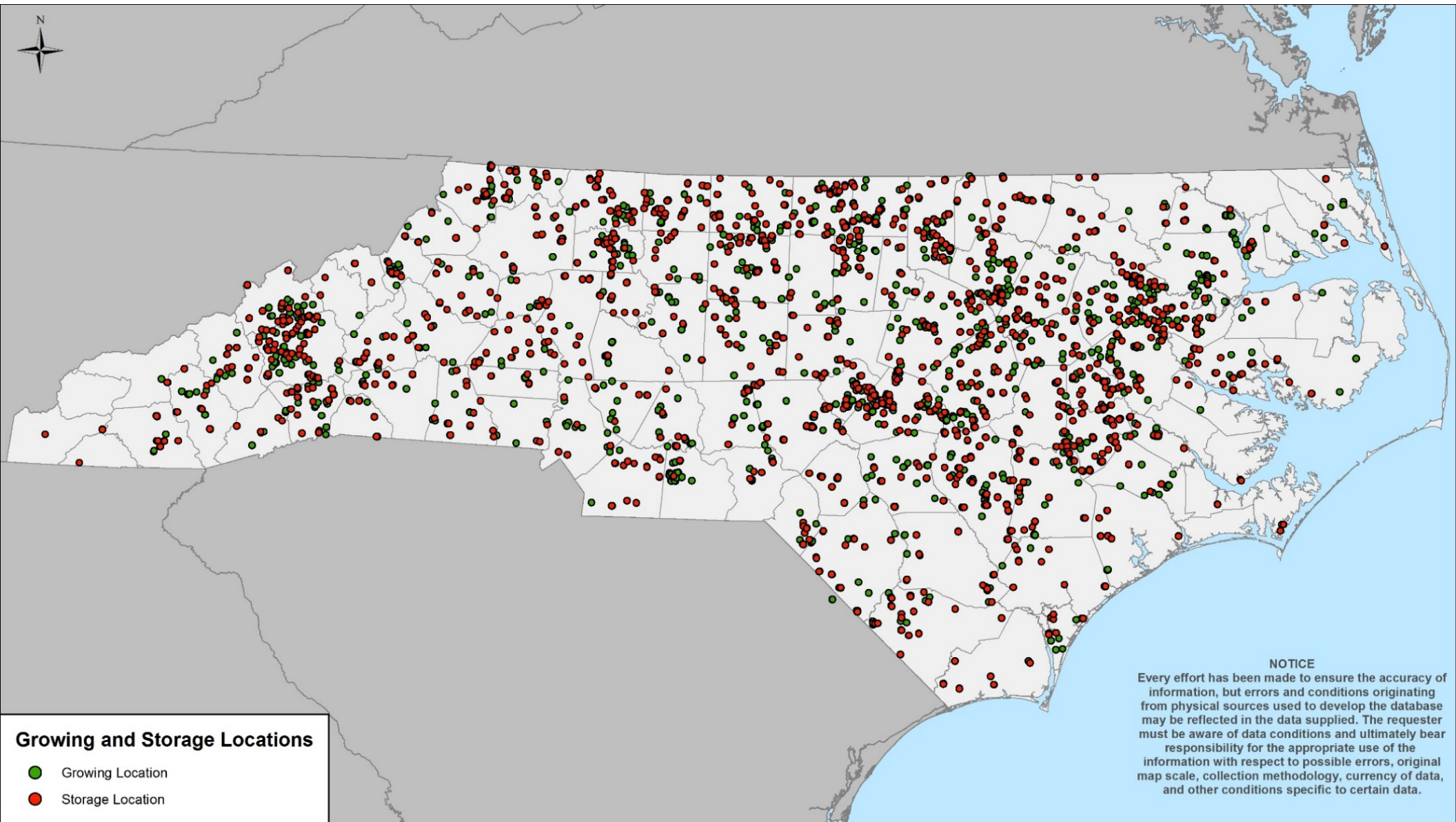
Dynamic Law & Regulation

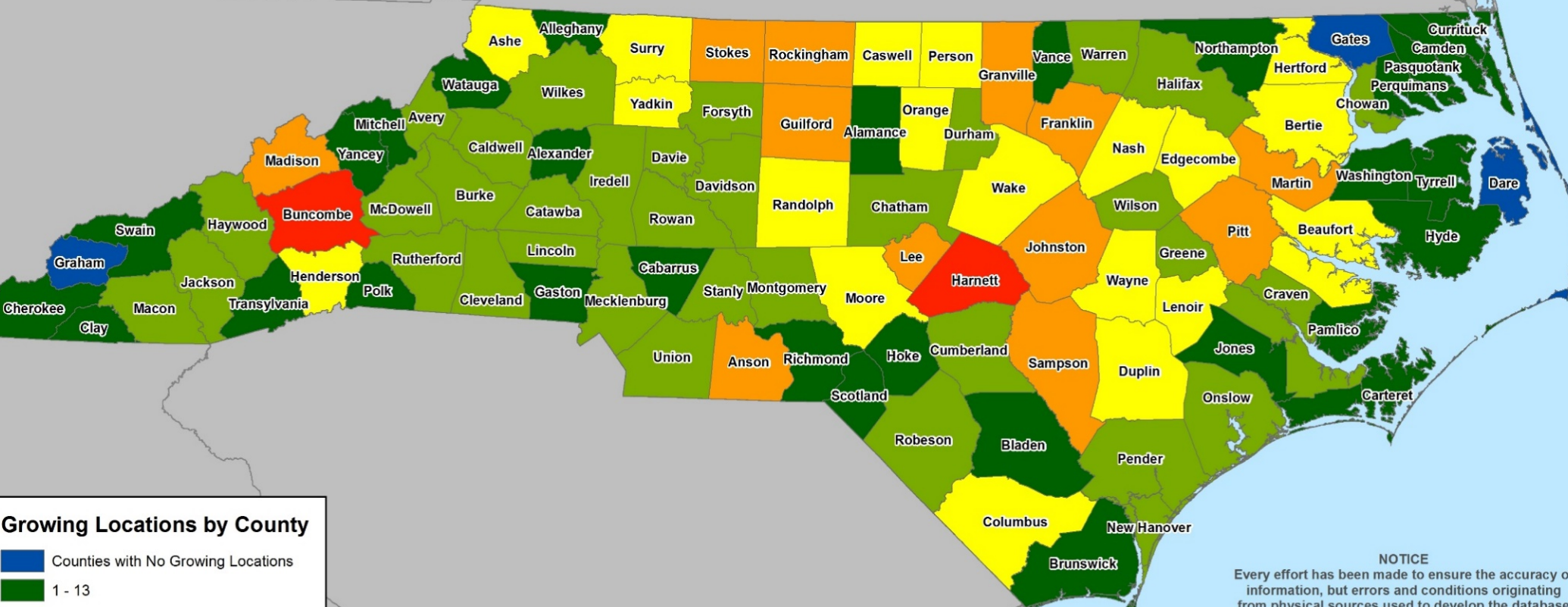
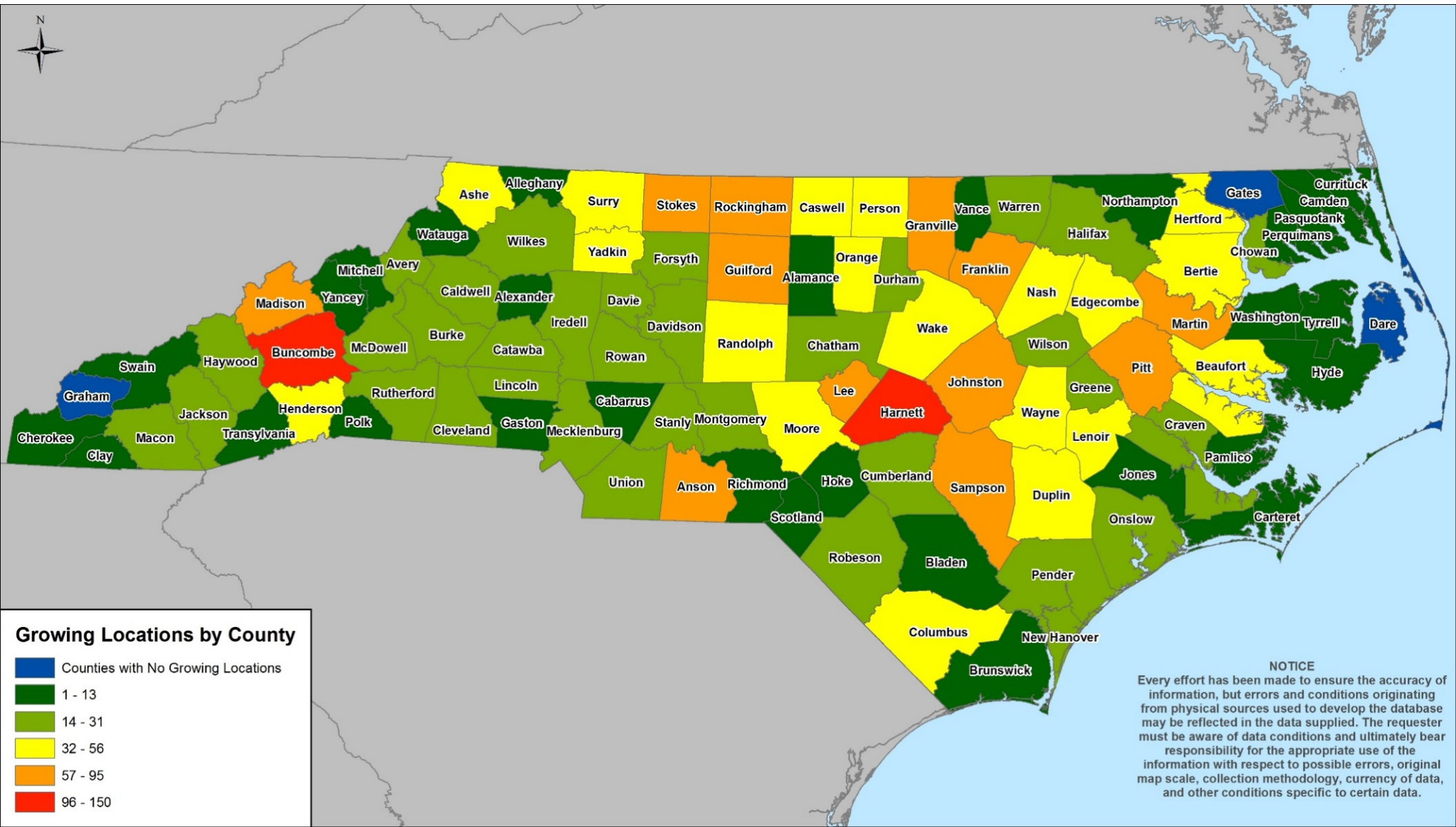
- Intent is to be under pilot program through 2020 growing season; October 30th, 2020
- Senate Bill 315 could potentially change that; contains smokable hemp ban; not currently law
- Come November 1st 2020 pilot program license MAY not be valid any longer; reapplication into new program could be required; hoping to transfer licenses into new program
- 2021 will see an entirely new rule set governing hemp; many similarities but some key differences; USDA interim rule in stone for 2 years hence the rule changes; changes after?
- TAKE HOME MESSAGE: Still under IHPP; same testing; same protocols; until further notice

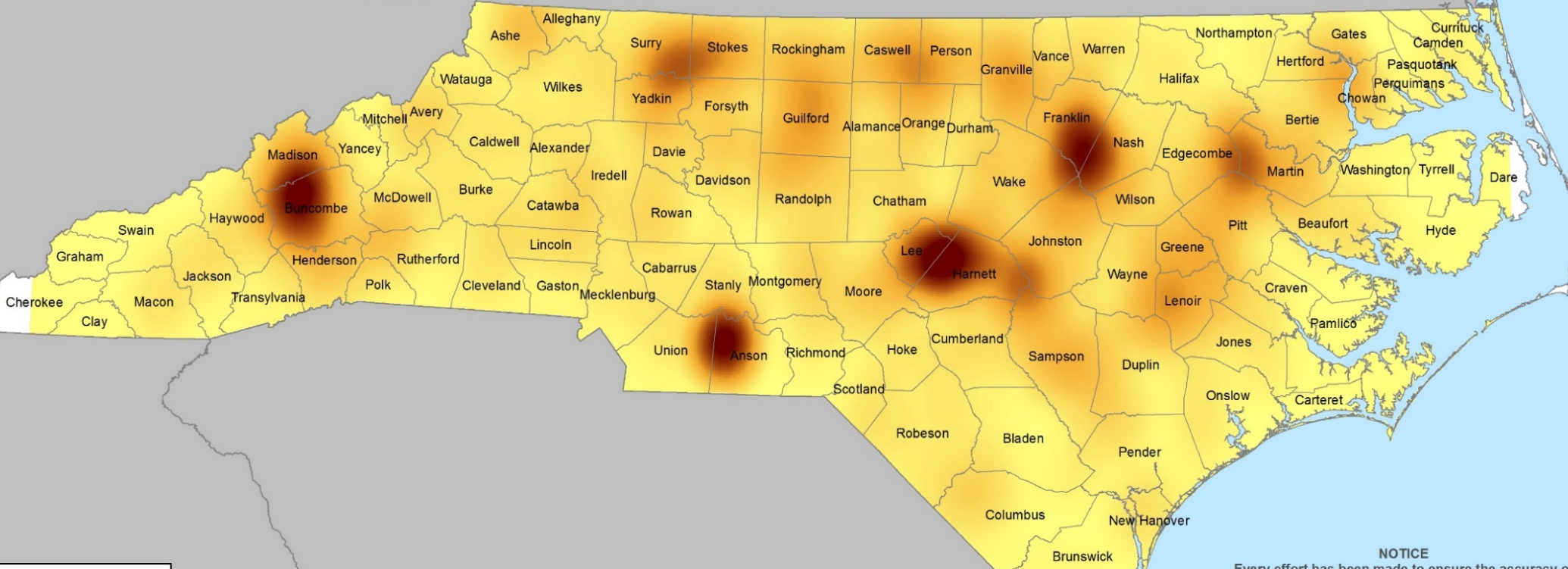
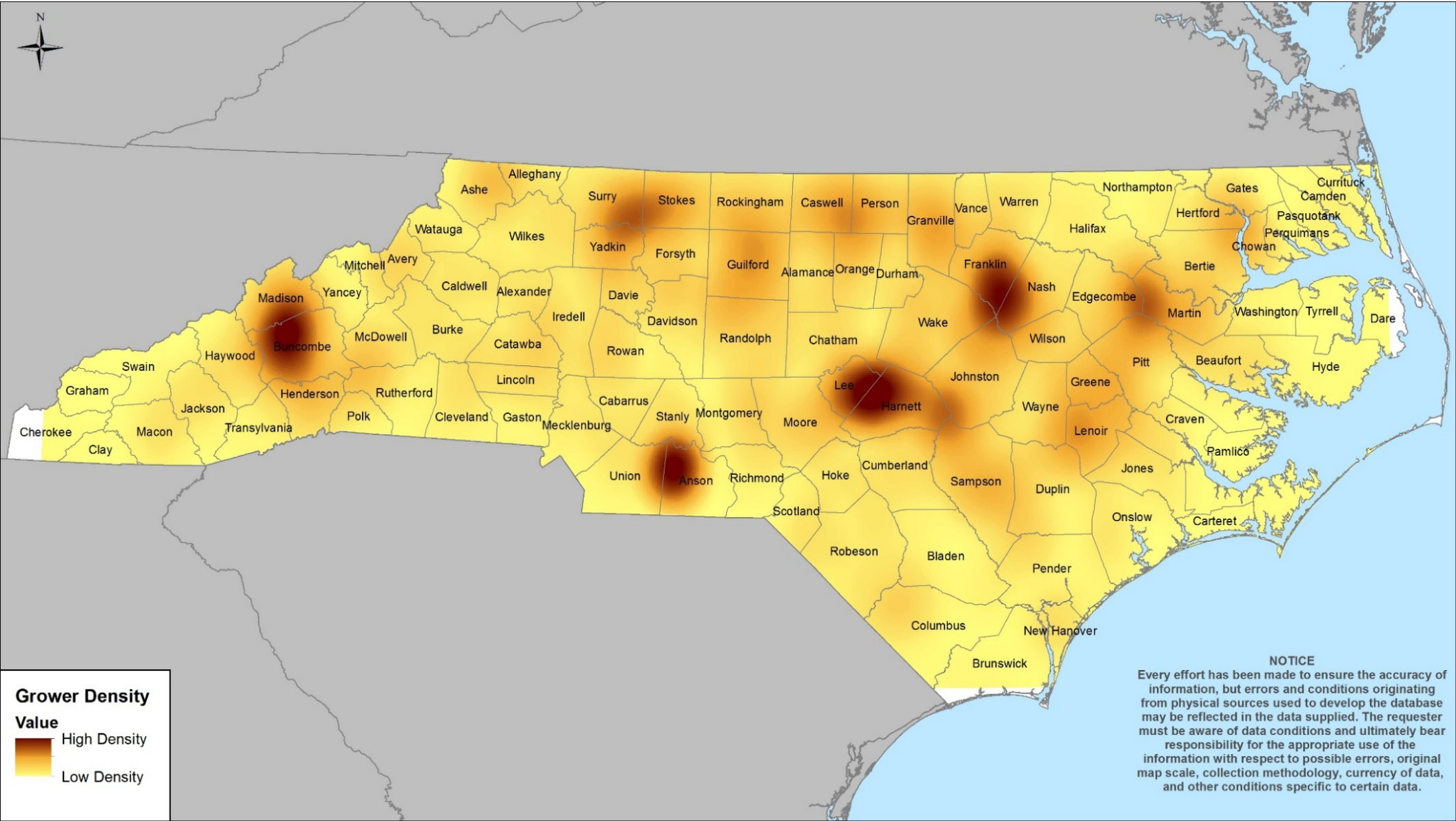


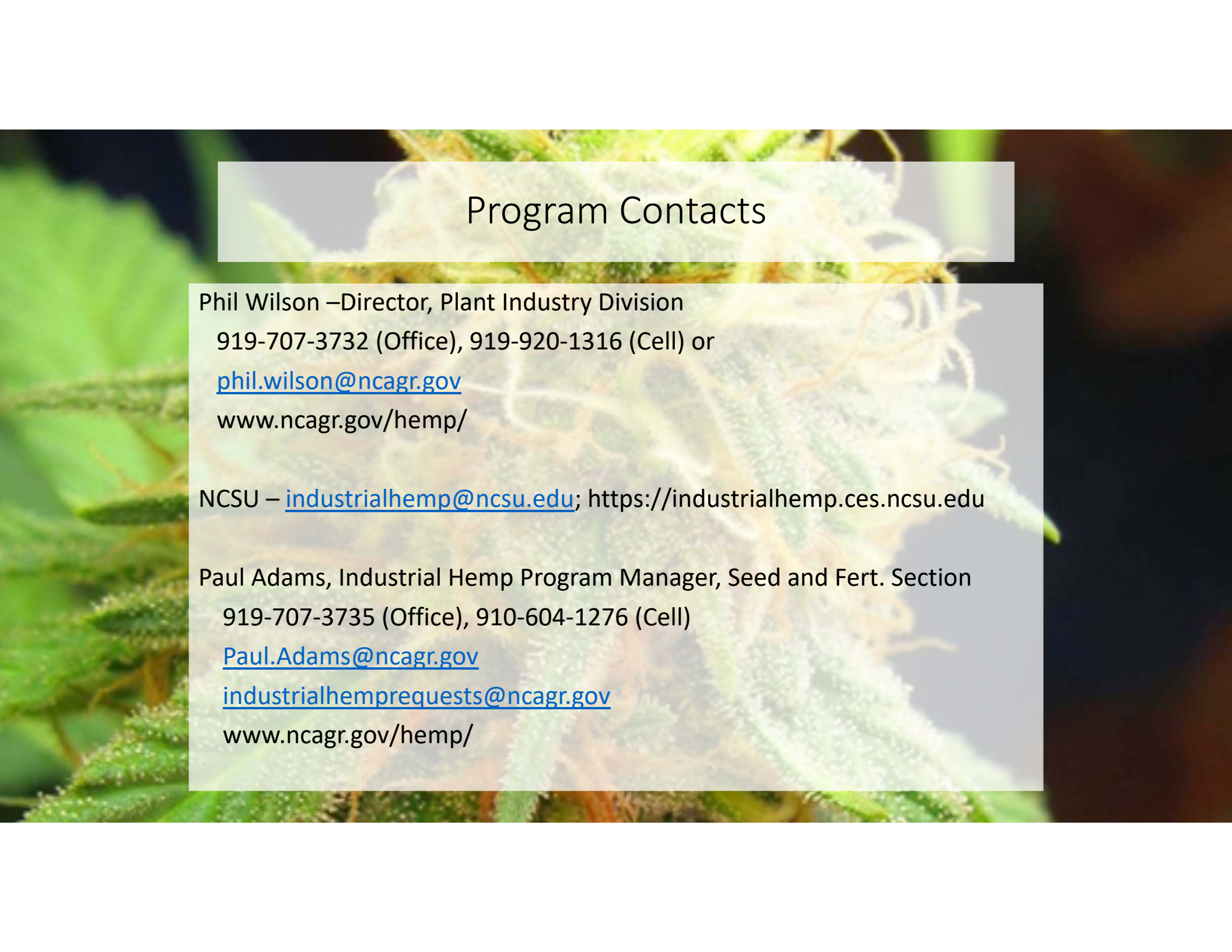
Program Stats

- 1404 Licensed Industrial Hemp Growers
- 17,589 Licensed Field Acres
- 6,900,337.59 Licensed Square Feet of Greenhouse production
- 989 registered processors









Program Contacts

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www.ncagr.gov/hemp/

NCSU – industrialhemp@ncsu.edu; <https://industrialhemp.ces.ncsu.edu>

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www.ncagr.gov/hemp/

A close-up photograph of a cannabis bud, showing its green, serrated leaves and numerous trichomes. The bud is covered in a dense layer of fine, white, hair-like structures. A semi-transparent grey rectangular box is overlaid on the center of the image, containing the text "QUESTIONS?".

QUESTIONS?