



Natural and Cultural Resource Management - Update

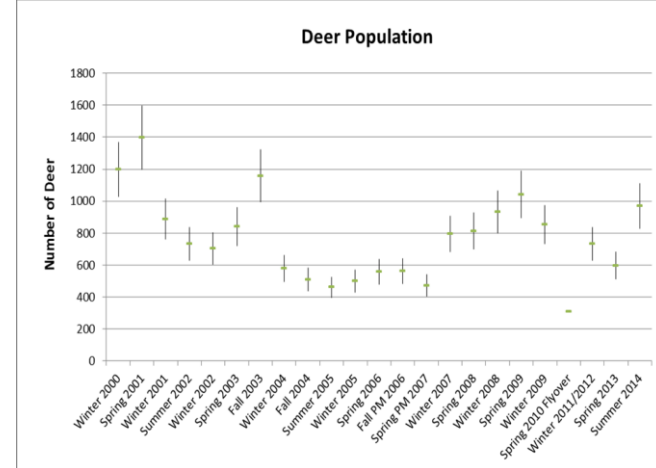
Tim Green

March 9, 2023



Deer Management

Background



- Efforts started in 2001 timeframe due to overpopulation of deer
 - Build support, polled staff
 - Estimated population
 - Documented damage to forest and landscape plants, accidents involving cars and people
 - Completed an Environmental Assessment
- 2015 established contract with White Buffalo
 - Population estimated at >800 deer
 - Removed 300 deer in 3 nights
- Culls in 2015, 2017, then yearly since 2019

Deer Management 2023

Initial estimate was 350 – 400 with 375 used for communications.

- Acceptable population is 80 – 250 deer on BNL
- Birth rate of ~60% in 2022
- We have to overcome reproductive growth every year
- Need to take 125+ just to maintain numbers



Deer Management 2023

Population reductions March 2023

- 7th reduction since 2015
- Target max of 250 deer
- 65 taken so far in 2023
- Second weekend planned for March 24-26



Deer Management – release of meat

Meat is donated to food pantries

- Meat samples tested for Cs-137 prior to release for consumption.
 - Administrative level of ≤ 1 pCi/g, wet weight.
(NYSDOH limit is 6.9 pCi/g, wet weight)
- 2023 – every 10th deer sampled; 6 samples taken so far.
- No data, yet for 2023
- Over 24,000 lbs. meat donated in total since 2015

Sampling of ticks and blood for Suffolk County Vector Control as part of NYSDOH tick-borne disease studies.



Fire Management



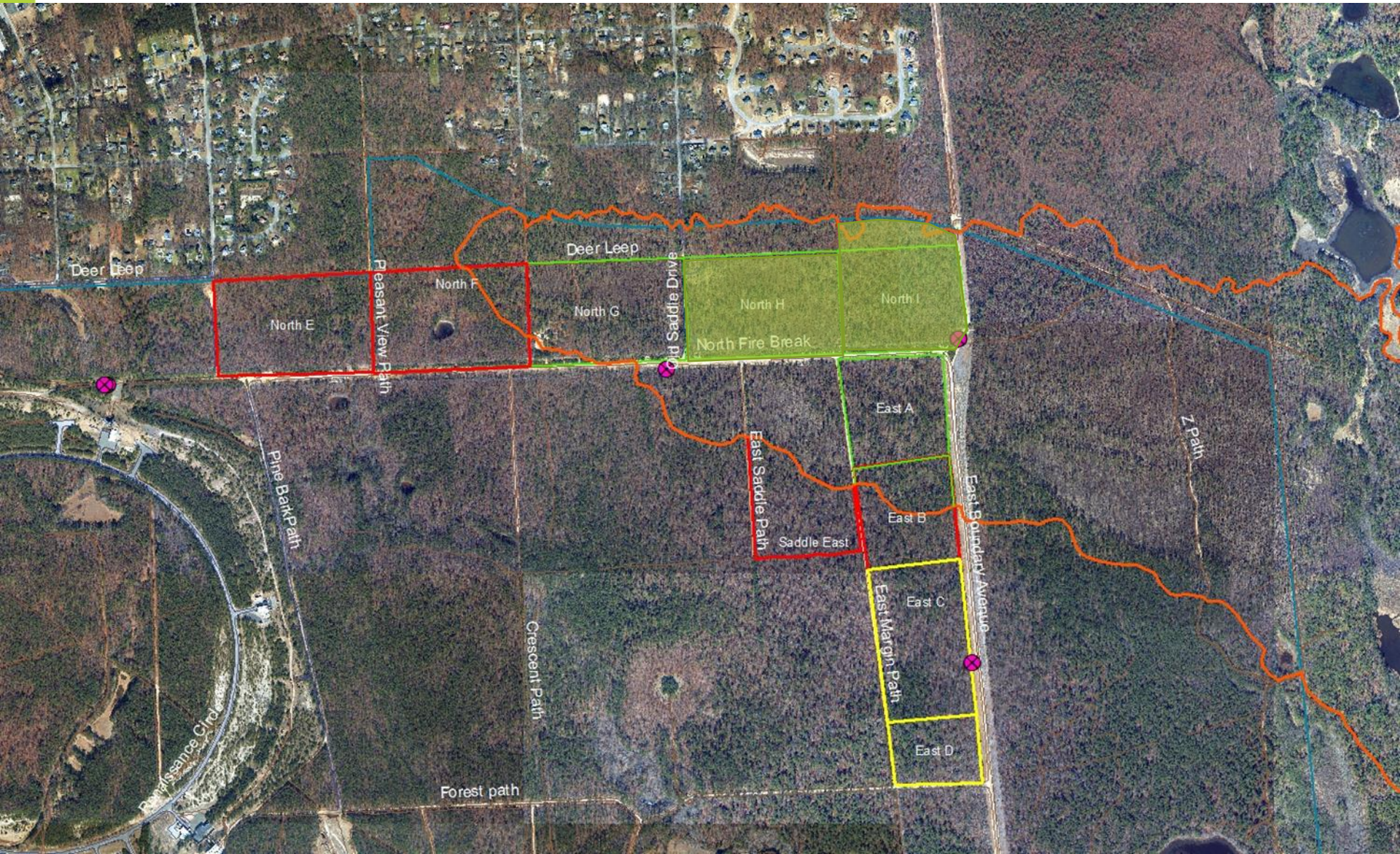
Mechanical Treatments



Result of 2012
Crescent Bow Fire



Mechanically Treated Units

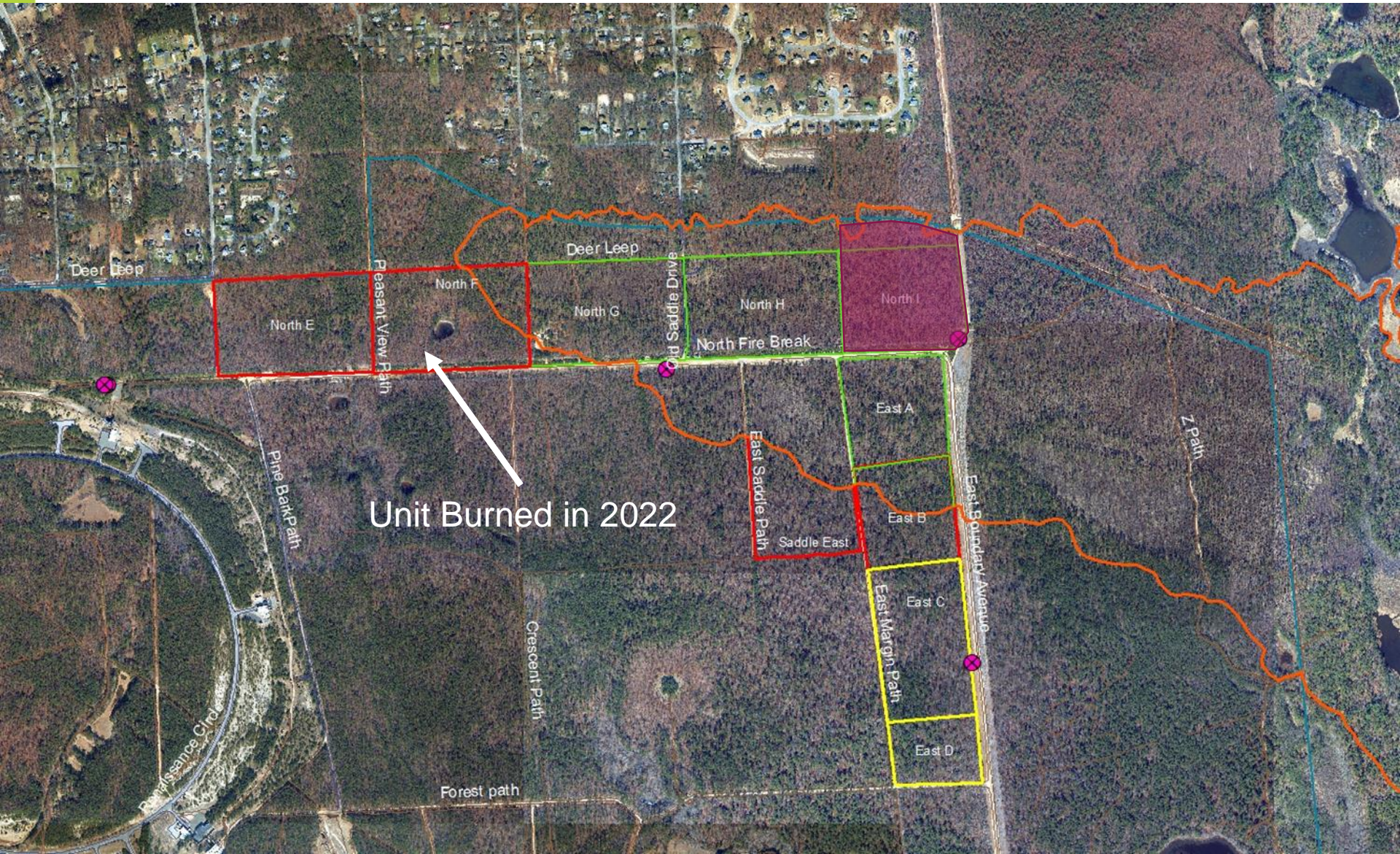


Mechanical Treatments





2023 Burn Plans



Southern Pine Beetle

- Significant impacts to BNL forests, 100s of acres
 - Beetle hitting small diameter trees
 - Some impacts to white pines
- Developing partnership with USDA
 - Forest Service
 - Effort to thin forest to build resilience
 - Monitor impacts



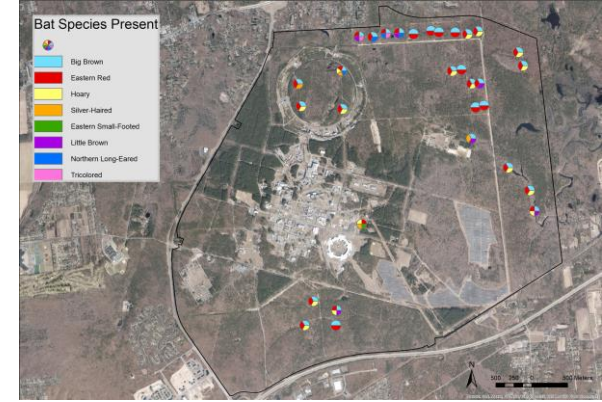
Northern long-eared bat (NLEB)

Northern long-eared bat (*Myotis septentrionalis*)

- Federally threatened
- Will be up-listed to endangered by 3/31/2023
 - USFWS issued interim guidance
 - Limitations to forest management and construction activities
 - Formal consultation will be necessary
 - Significant need for research
- Additional bats expected to be listed, too



Monitoring Bats



- Monitoring
 - Acoustic monitoring showing bats other than northern long-eared.
 - NLEB calls were not validated
 - Mist netting in August
 - Eastern red bat, big brown bat, and largest number of silver-haired bats ever captured in NY, 18 in one night





Coyotes on Long Island

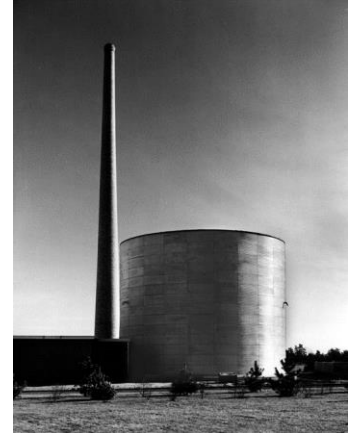


- Coyotes are very adaptive to human environments
- Long Island is last large landmass for establishment
- Several breeding pairs Nassau Co. and eastern Suffolk Co.
 - Numbers are such that dispersing young from Nassau are expected to move east
- Working with the Long Island Coyote Study Group
 - Build understanding of current mammals (camera traps, small mammal trapping)
 - Participation in Long Island Mammal Study (repeat of 1972 study), part of statewide effort
 - Data can be used as baseline to document change due to coyotes colonizing Long Island

Cultural Resource Management

National Historic Preservation Act (NHPA) plus a number of other regulations governing cultural resource management

- Section 106 reviews
 - Evaluation of buildings 50+ years of age
 - Impacts to historic resources
- Archeological evaluation before major ground disturbance
- Memoranda of Agreement for adverse impacts (demolition)
 - Require recordation
 - Development of kiosks (Discovery Park, BMRR stack)
 - Still negotiating for 1940s Water Tower



Section 106 Evaluations

- Evaluations – 2016 through 2022
 - All buildings, structures, infrastructure built prior to 1975 evaluated, including land features
 - Now have a known list of buildings, structures, features to manage
 - 32 Buildings or structures (following slides) eligible for National Register of Historic Places, plus Gamma Forest and previously determined eligible WW I trenches & foundations, and two archeological sites
- Not eligible
 - Electric, steam, potable water, sewer, stormwater, roads, sidewalks, parking lots, fences, railroad, and mosquito ditches





Legend

-  Eligible
-  Not Historic
-  Demolished

0 500 1,000
Feet



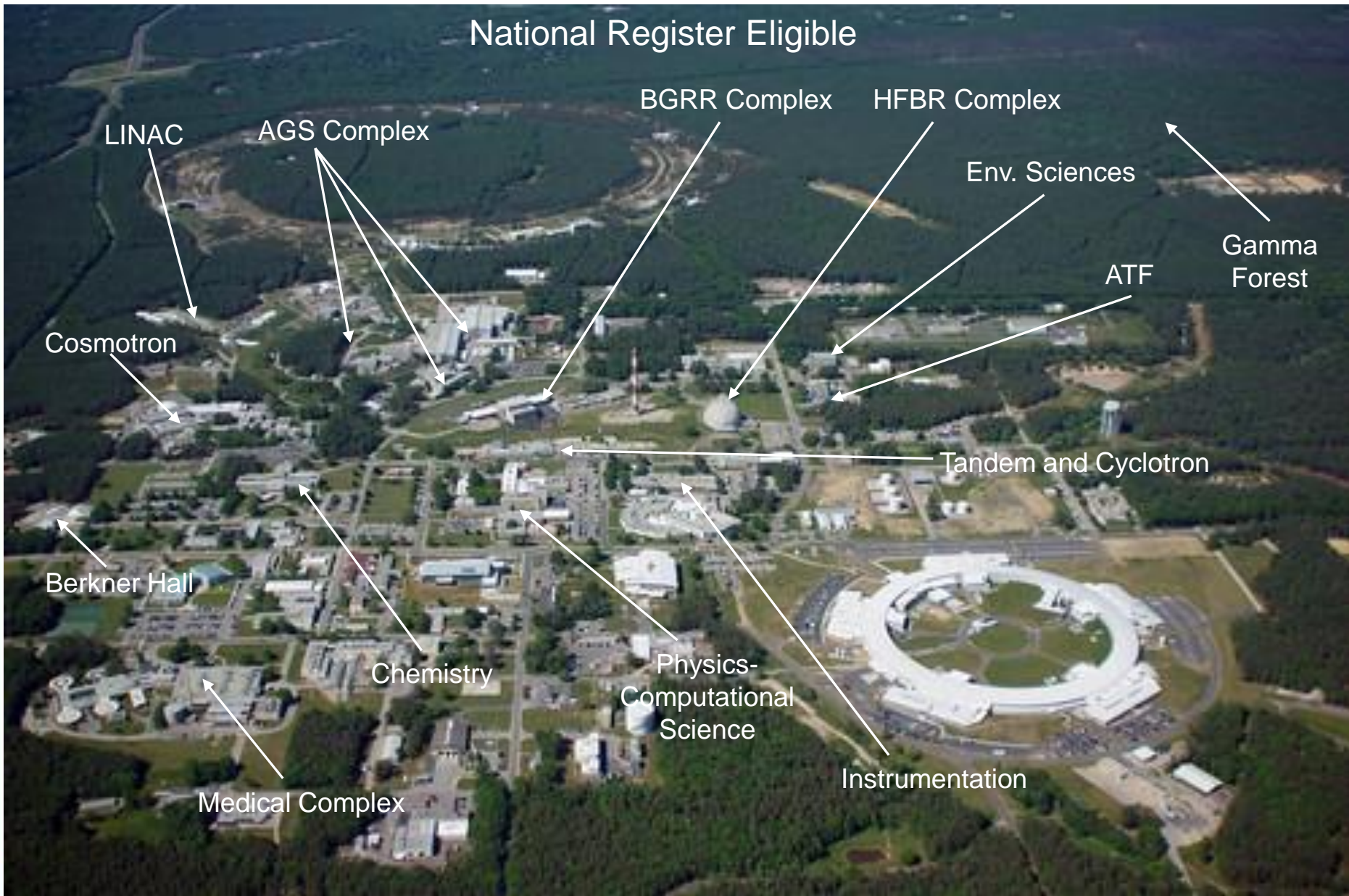
Environmental Protection Division

National Register Eligible, Ineligible, and Demolished Buildings

JLH - 3/6/2023
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resources/bldg_statud.mxd

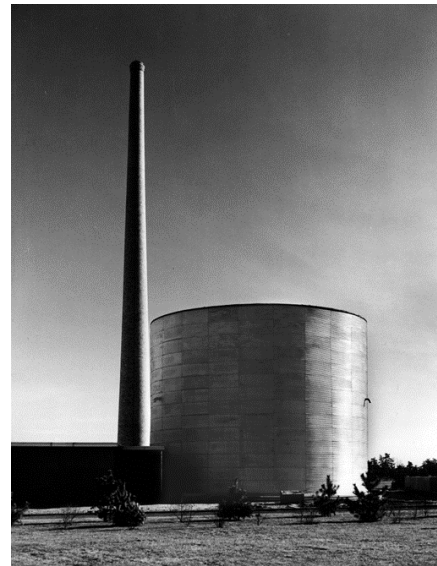


National Register Eligible





Bldgs. 490 & 491 Medical Complex



Bldgs. 510 & 515 Physics & Computational Sciences (Max O. Urbahn)



Bldg. 535 Instrumentation (Max O. Urbahn)



Bldg. 555 Chemistry (Marcel Breuer)



Bldg. 488 Berkner Hall (Max O. Urbahn)



Bldg. 820 Accelerator Test Facility



Bldg. 830 Environmental Science



AGS Complex



Bldg. 901 & 901A



Bldg. 911



Bldg. 930 - LINAC



Questions?

