



Addressing Species at Risk Before Listing - MCB Camp Lejeune and Coastal Goldenrod



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Pilot Project: Species at risk on DOD installations

- Funded by DOD Legacy Resource Management Program
- Developed in partnership with the U.S. Fish & Wildlife Service, NatureServe and the North Carolina State Natural Heritage Program
- Camp Lejeune chosen as Marine Corps installation and Coastal Goldenrod was chosen as the species at risk



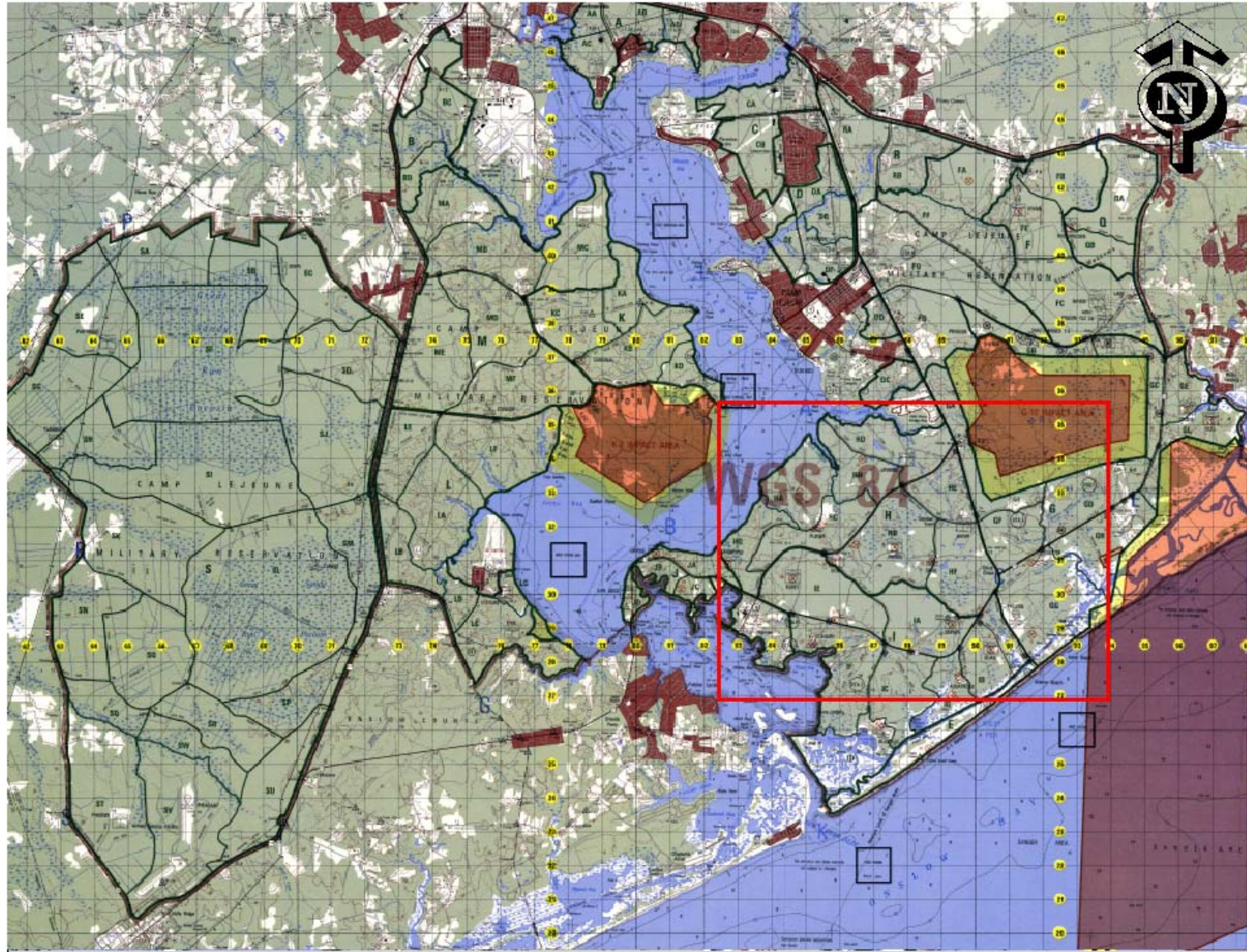
Purpose

- To develop voluntary guidelines for management of species at risk that are not federally listed
- Species should have a high % of populations on DOD land, so good management by DOD will have a significant impact on entire population
- Goal: to manage target species in a way that will make listing unnecessary and therefore maintain flexibility for DOD installations



- *153,000 acres total
- *24,000 acres open water
- *12 miles beachfront

Camp Lejeune, North Carolina



Coastal Goldenrod (*Solidago villosicarpa*)

- Discovered on Camp Lejeune in 1991
- Described as a new species in 2000(LeBlond)
- Known to exist in only four populations (3 are on Camp Lejeune)



Coastal Goldenrod (*Solidago villosicarpa*)

- Ranked G1 – critically imperiled globally
- Ranked S1 – critically imperiled in NC
- Federal Species of Concern



Basal Rosette



Habitat

- Maritime influence
- On MCBCCL, found in disturbed areas dominated by loblolly pine and mixed hardwoods
- Thrives in disturbance-caused openings (including roadsides)
- Not associated with high fire frequency



“Typical” Habitat



Disturbed Site

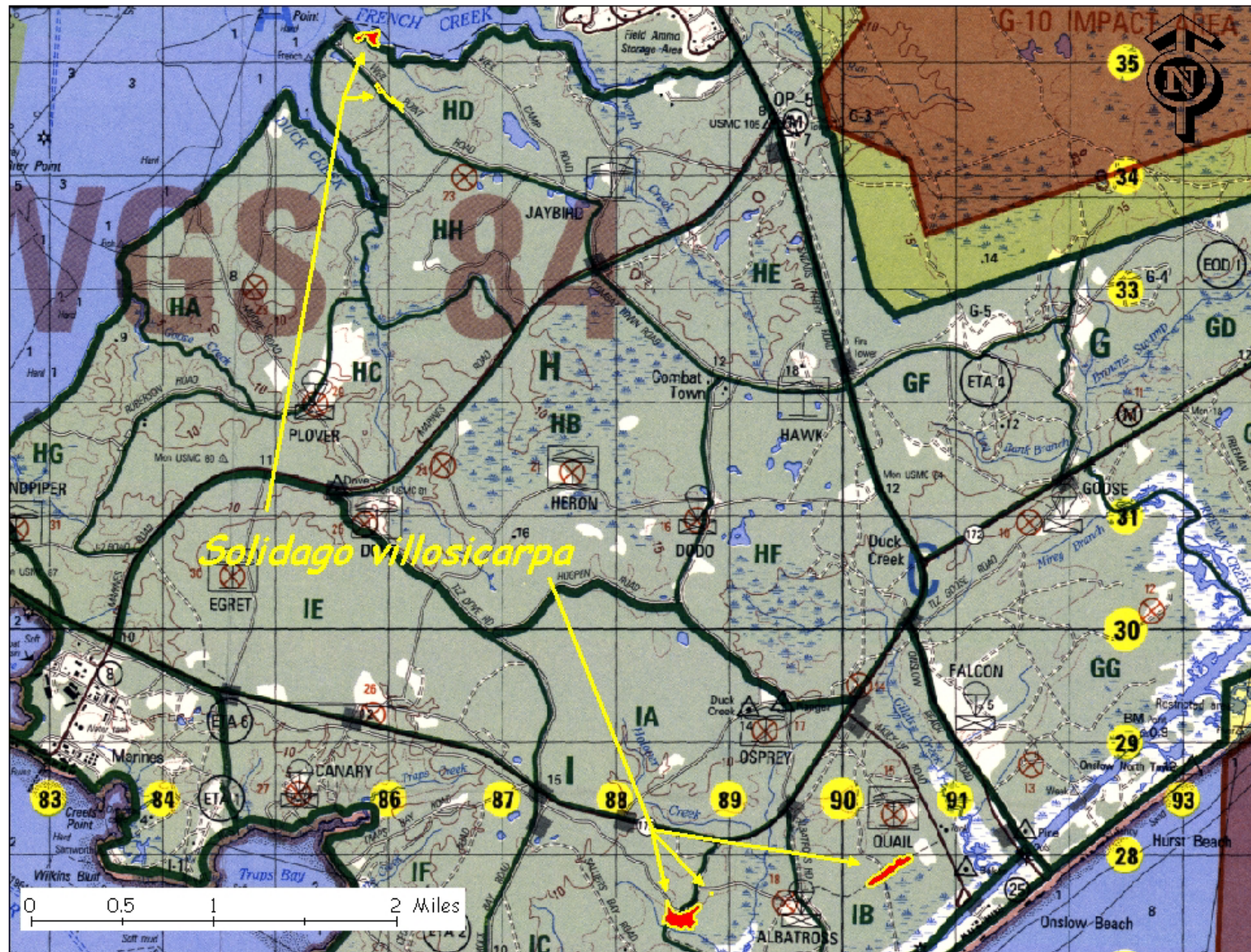


Threats on MCBCL

- Construction impacts associated with infrastructure
 - Vehicle traffic
 - Digging holes and trenches, and bivouacs
 - Prolonged heavy shading
- * Training at current levels does not seem to be detrimental



Solidago villosicarpa on MCBCL





Management Objective

- No more than 30% decrease in number of individuals in each of three populations over a 10-year period

(collect data each year for 10 years – # of individuals, aerial extent and % of individuals in flower, fruit or vegetative condition will be critical factors in assessing management goals)



Management Recommendations

- Survey to determine extent of population
- Avoid soil-disturbing activities – maintain habitat
- Avoid damage to individual plants
- Determine whether canopy should be thinned, or shrub competition should be reduced



Research Recommendations *

- study natural history
- pollination mechanisms
- collect seeds
- determine historic fire frequency

* As much as possible, research and management schemes will be developed, and carried out with the help of partners (USFWS, NCNHP, NC Botanical Garden)



What's in it for Camp Lejeune?

- Exploring an agreement with US Fish & Wildlife Service to ensure good management will not negatively impact training in the future
- Model: Candidate Conservation Agreement with Assurances
- Benefits of keeping *S. villosicarpa* off the endangered species list
- Flexibility in future training and planning



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Questions?

