



**NANTUCKET CONSERVATION FOUNDATION, INC.**  
Invasive Species Management Reporting

**E.C. Buck**  
February 12, 2021

**Project Location/NCF Property Name** (Attached Overview Map): Medouie Creek  
**MA DEP Order of Conditions File #** SE48-2915 **File Status:** Notice of Intent 2016  
**Year Project Initiated:** 2017 (herbicide)

**Target Species:** Common reed (*Phragmites australis*)

**Treatment Method:** Herbicide Manual Mechanical

**Treatment Details:**

- The small patch of *P. australis* located on the south side of the ditch at Medouie Creek was assessed and delineated with a GPS unit for annual documentation. In 2020, the patch had spilt into two small sections (Refer to Figure 2), and the size significantly decrease from past years; 2019 total of .02 acre compared to 2020 total of .008 acre.
- Manual treatment in previous years consisted of cutting the stems below the water line.
- After assessment of the patch, it was determined to use herbicide treatment because the re-sprouts seemed to have weakened from previous manual treatments.
- Individual stems of the patch were treated using the clip-and-drip method, with Rodeo® wetland formulated glyphosate-based herbicide mixed 2:1 with water and applied using a lab wash bottle.
- The patch was completely treated (via clip-and-drip); the patch perimeter was documented with a GPS unit, cut and treated on 8/10/2020. The treatment took 2 hour 30 mins with one herbicide applicator. A total of 1,000 ml of herbicide was applied. Nine pop-up stems located on the north side of the ditch were also treated on the same day.
- A satellite population of approximately 30 very large and flowering stems were found adjacent to a tupelo stand located along the east side of the restricted marsh. (Refer to Figure 3)
- The individual stems were treated (via clip-and-drip) on 9/9/2020; flowering heads were cut, bagged, and removed. Additional treatment was administered to approximately 60 small flowerless re-sprouts within the same area around the restricted marsh. A total of 250 ml of herbicide was applied by one herbicide applicator and took a total of 45 mins.

**Acres Treated this season** (Attach Map): **Total** .014 acre: Patch (.008 acre), satellite population (.008 acre).

**Amount of Herbicide Used:** **Total:** 1,250 ml; Patch (1,000 ml); satellite population (250 ml)

**Staff Time this Season:** Total of 3 hours 15 mins and required only one staff member.

**Herbicide Applicator Licensed Staff Member(s):** Elizabeth Buck

**Associated Monitoring:** Invasive Plot/Transect Monitoring Photomonitoring GPS Documentation  
Veg Community Other

**Monitoring Details** (Attached Graph, Figure, Table or Photos as needed):

- On foot survey consisting of GPS documentation of stems, with only a focus on the previously treated patch and satellite populations. The entire population of *P. australis* at Medouie Creek was not delineated with GPS unit in 2020 because it was already documented during the 2019 season.
- The small patch that was manually cut in 2019 (.02 acres) dramatically decreased in 2020 (.008 acres).
- A satellite population was identified with approximately 30 very large and flowering stems found adjacent to a tupelo stand located along the east side of the restricted marsh.
- Approximately 60 small flowerless re-sprouts were also identified same area around the restricted marsh.

**Future Management Recommendations:**

- Annual survey consisting of GPS documentation of stems.
- Annual treatment requirements will likely vary widely from year to year based on the effectiveness of the previous year's treatment.
- Continue to assess the treatment needed for the re-sprouts based on GPS documentation.

**Additional Species or Locations included in this project?**     Yes     No

Please fill out an additional form for each. The same Maps/Figures can be used as appropriate.

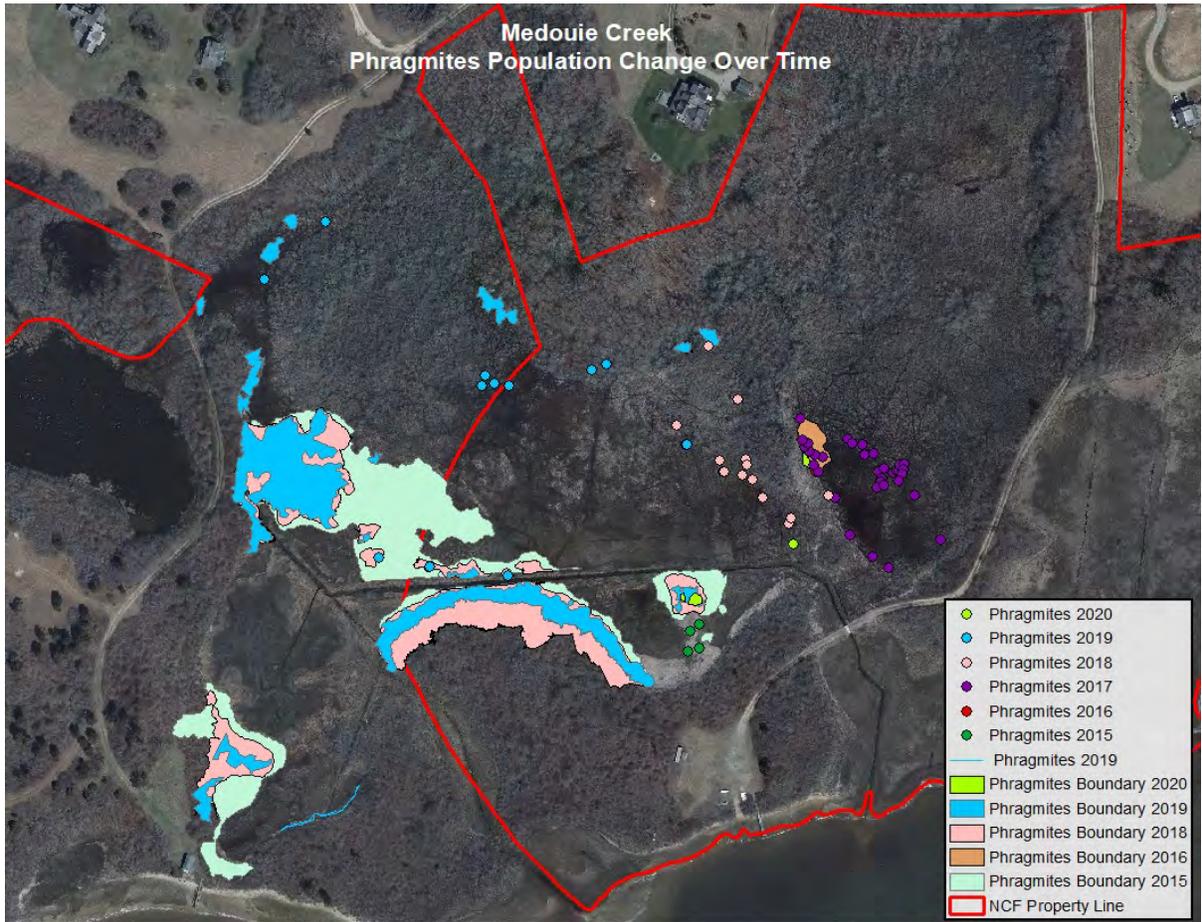


Figure 1: Phragmites Population Change Over Time (2015-2020). Green indicates only the perimeter of the area treated in 2020.

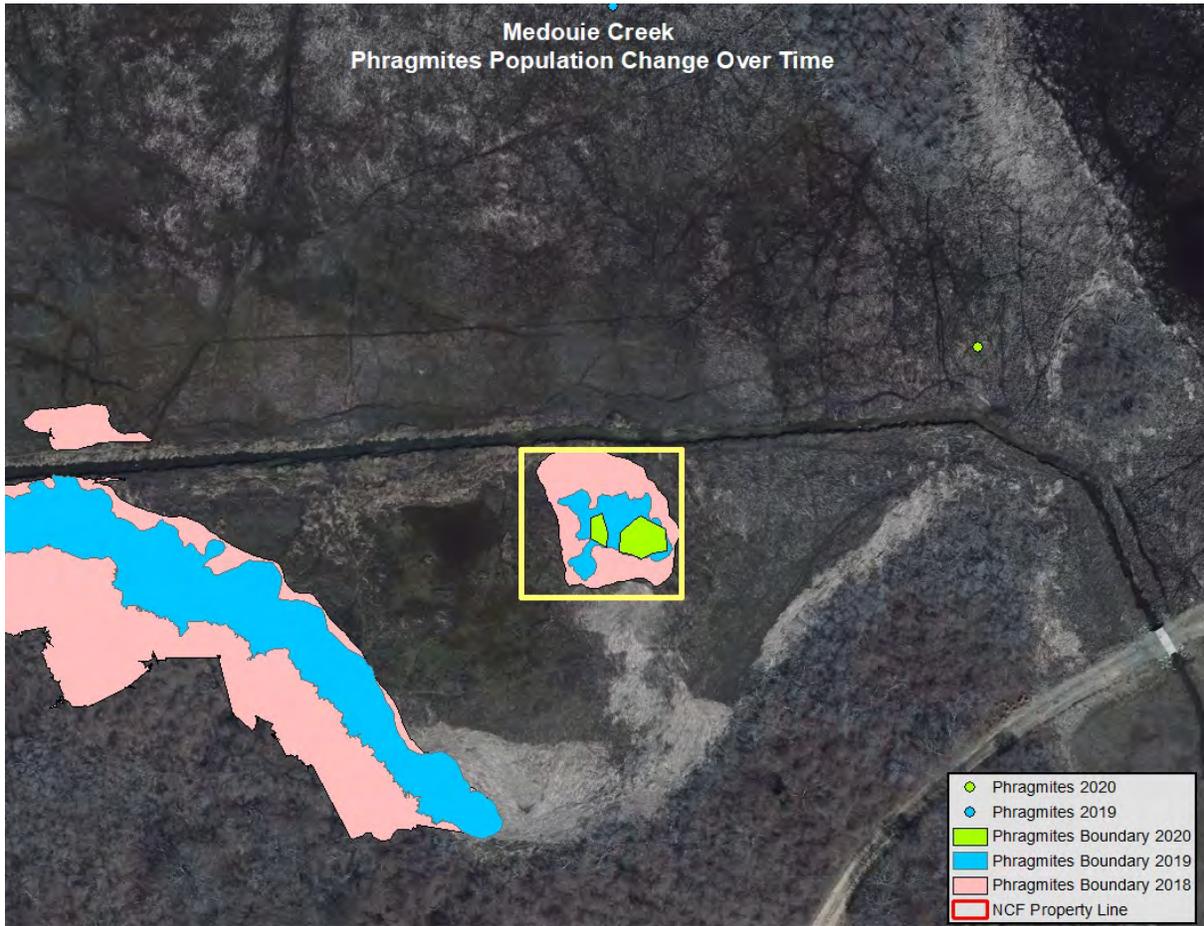


Figure 2: The yellow square represents the small patch that was manually cut for both the 2018 & 2019 season. The remaining (.008 acre) was treated 2020 by application of herbicide via clip and drip method.

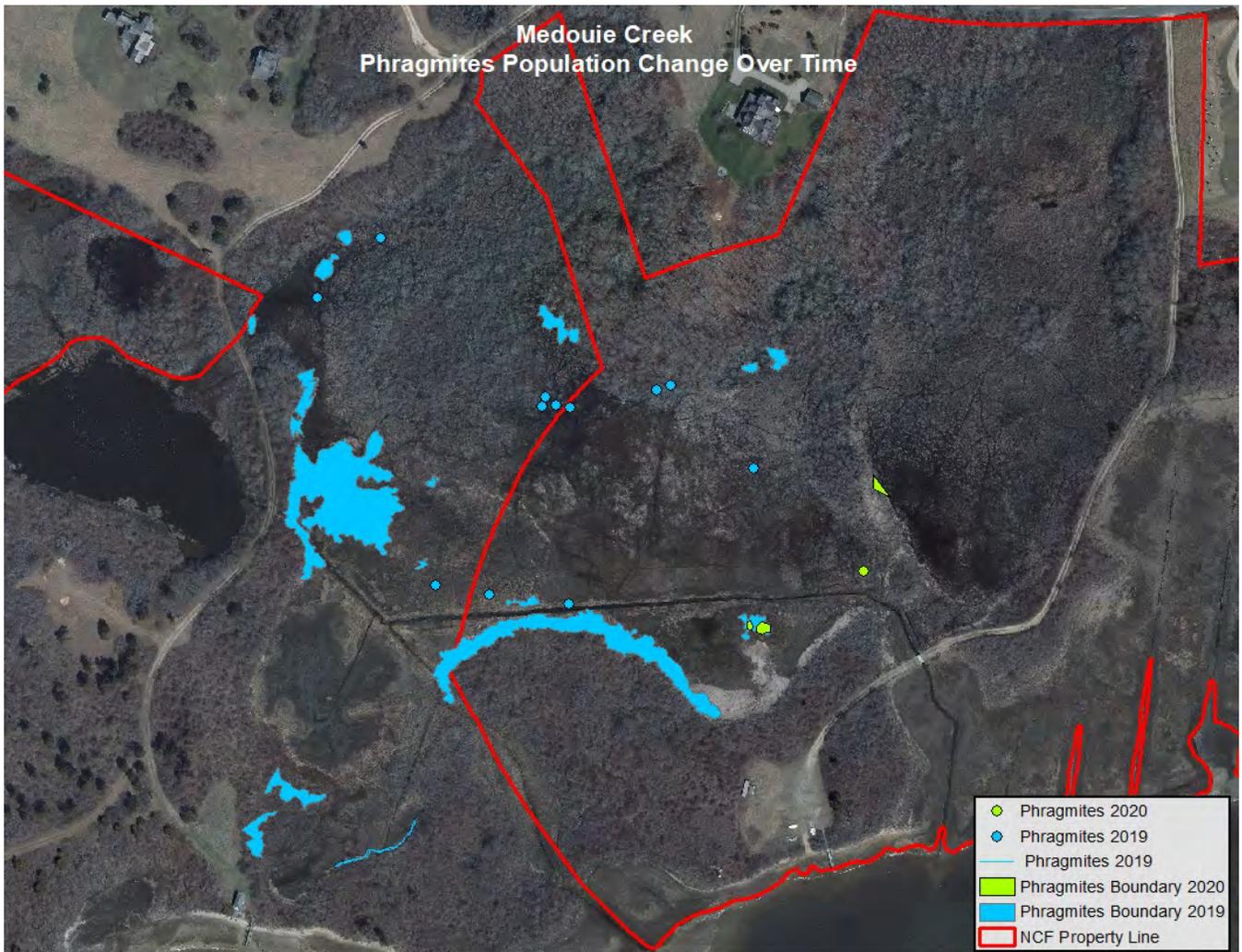


Figure 3: Entire Phragmites Population for 2019 (blue) and the treatment areas for 2020 (green).