

Technical Providers for the Palmer River Watershed

Massachusetts Association of Conservation Districts

Project # 13 08/319



Why Palmer?

- Extensive monitoring in both Massachusetts and Rhode Island; Bacteria and Nutrient levels of concern
- NRCS, National Water Quality Initiative
- EPA mandating that states monitor water quality of watershed in the NWQI
- Active watershed partners
- Active and engaged agricultural community



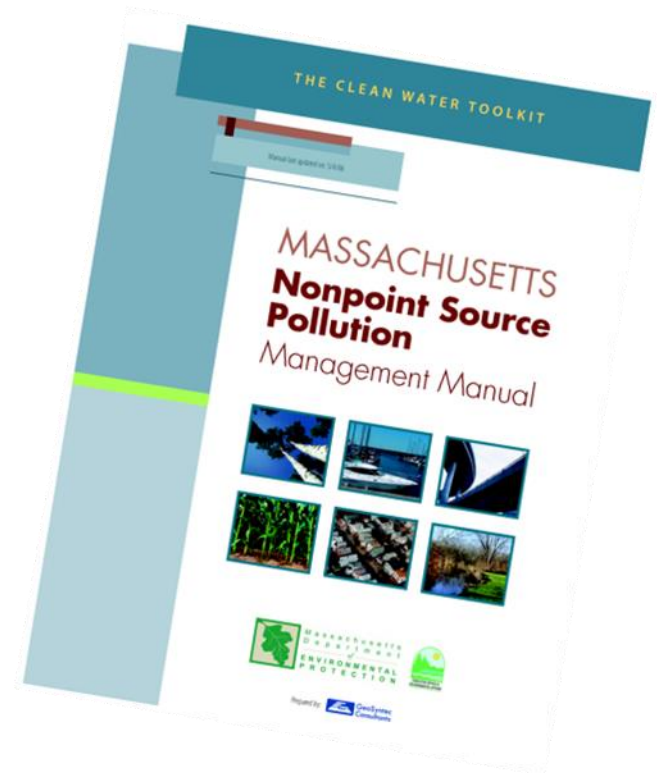


Palmer River Project



Funded by MADEP 319 Non-Point Source Program.

Mass. Assoc. of Conservation Districts is contractor.





Project Goals

1. Complete as many farm conservation plans as possible.
2. Fully implement as many of the completed plans as possible.





Outreach and Education

- Rehoboth Agricultural Commission
 - Outreach to land owners
 - Coordination with municipal boards
 - Public Education. Cable TV
 - Social media presence
- Bristol County Conservation District
 - Education on soil health.



Rehoboth Ag Commission



Bacteria data

- ESS, 2001-2002
- ▲ MA-DEP, 2006
- ▲ MA-DEP, 2010-2011
- MA-DEP, 2012

Chemical/nutrient data

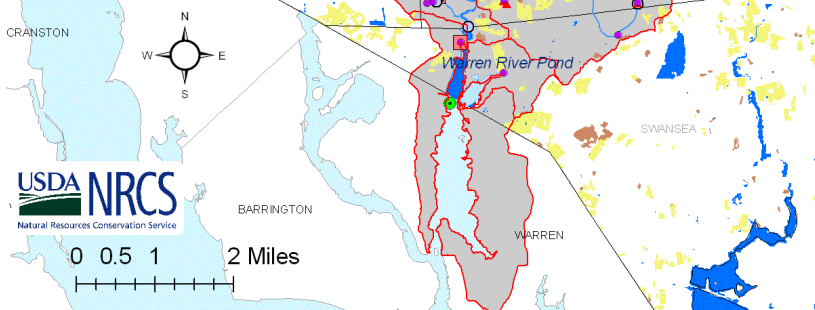
- USGS, 1973+
- EPA, 2001
- ESS, 2001-2002
- MA-DEP, 2009
- Sub-watersheds
- Palmer R. Watershed

Land Use (MassGIS 2005)

- Farmland
- Open/Brush
- Water

Town boundaries

- MA
- RI



Rehoboth Agricultural Commission
148 Peck Street
Rehoboth, MA 02769

November 14, 2014

Dear Equine and Stable Owners:

The Rehoboth Agricultural Commission invites you to an informational workshop specifically for the equine industry, Thursday, December 11, 2014 7:00PM at the Rehoboth Council on Aging. We will have presentations from the Rehoboth Board of Health on the Town's horse regulations, information on composting horse manure and a representative from the USDA, Natural Resource Conservation Service to discuss the technical and financial assistance available to horse farms. The Rehoboth Agricultural Commission is providing landowners in the Palmer River watershed with information and assistance to prevent nonpoint source pollution.





Bristol County Conservation District



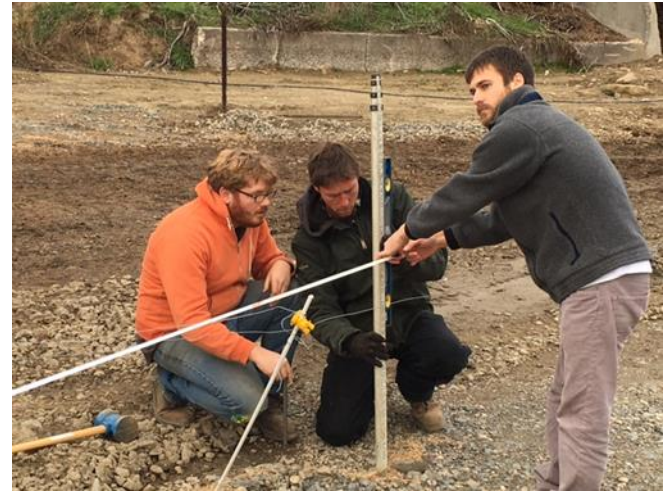
- Held 2 soil health workshops
- 150 people attended





Develop and Implement farm conservation plans

- MACD Conservation Planners, Comprehensive Nutrient Management Planner
- USDA/NRCS Planners, Engineers, Leadership
 - 6 Conservation Farm Plans
 - 2 CNMP

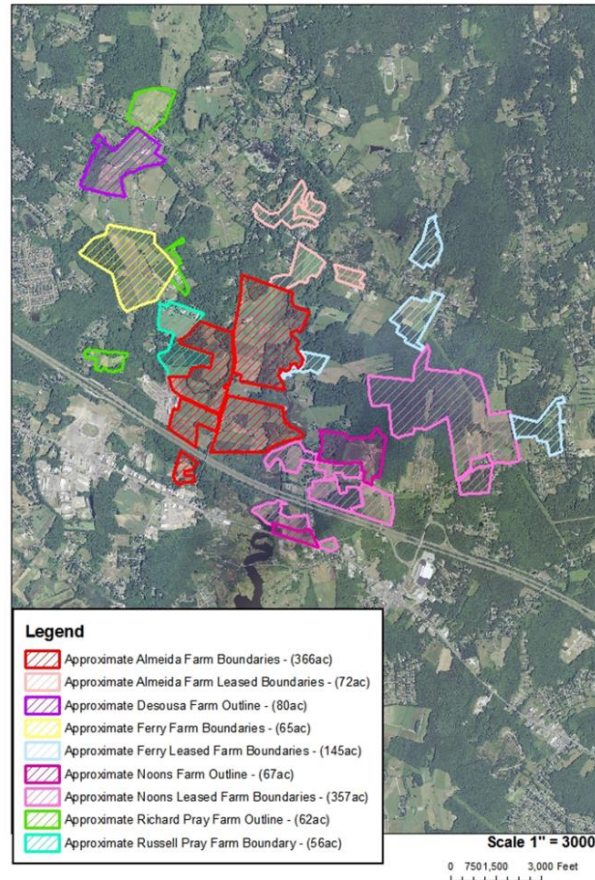




Provide technical and regulatory support

- New England Consulting (Iain Ward)

Palmer South - TA Properties - 1,270ac



Direct TA provided to 16 farms.

7 equine

3 dairy

3 vegetable

3 beef



Provide technical and regulatory support

- Access to financial support

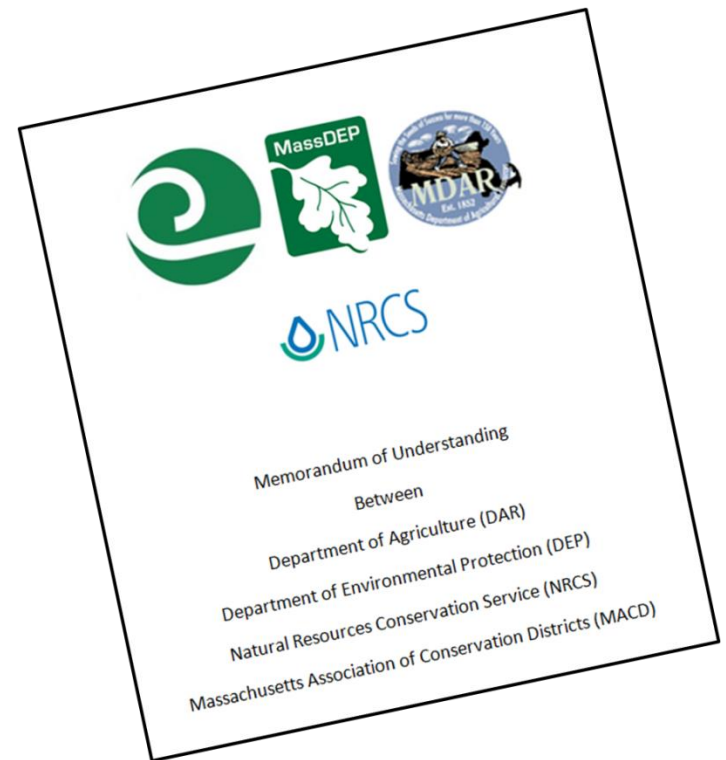
- AEEP – \$60,500
- AFSIP – \$50,184
- AMA – \$29,000
- EQIP – \$1,026,879
- 319 Funds \$68,234





Regulatory Certainty

- Partners believe in development
- NRCS developing verification tool





Stream Crossing/Animal Exclusion

Prove we can do this



Funded by 319 and
Farmer



Barn yard run-off Manure Management

Clear Run Brook

225 head of cattle

No relations with NRCS

Farming since 1970's





- Still In progress
EQIP Contract FY16
- CNMP
 - Manure Storage
 - Barn Yard Run-off



Happy Cows



Hi there, Bessie here. Checking in to tell you all about my new digs. I'm under cover, in my new bedded pack. See my girlfriends up the row? They're all relaxing too. When we are lying down and ruminating, we are making milk.

So, the deal with the new digs is: now that we have a clean dry area to lie down, we generally keep it that way. When we get up to feed at the bunk behind me, that's when we drop our manure. Instead, it will be scraped out the back eventually into a small storage pit may be constructed in this location.

Cool, huh? Boss man says vet bills are lower, too. Life is good on my new pad! Thanks, Palmer River People!



Barn Yard Run-Off

120 Head of cattle

Existing NRCS Contract
about to Expire

Barnyard run-off through
manure into Clear Run
tributary.





Gutters and Sub Drains Installed





CNMP Development

A Comprehensive Nutrient Management Plan (CNMP) is a part of a good conservation plan for livestock operations. It's a plan to protect water quality and soil health by managing manure and the nutrients in it.





Field Run-Off/Drainage

- Clear Run Brook
- New EQIP and AEEP Contract FY15
- Installed water diversion





Soil Health

- Vegetable and Dairy Farm 438 acres
- On Main Branch of Palmer
- No relations with NRCS
- 60 head cattle, wants to double herd





Soil Health

- Wind & Water erosion
- Animal access to river





Soil Health

Farmer made investment on own

- Fencing out cows from river
- Permeant seeding of highly erodible land
- Over \$16,000



- Next Steps
 - CNMP in development
 - Manure storage



Future

- Equine
 - Over 800 horses in watershed
 - Johnson and Wales University Equine Studies
- Livestock
 - *Beef, Sheep, Hog*
- Vegetable Growers





EQIP Funding Availability

USDA, Natural Resource Conservation Service has made **\$970,000** available for FY16 for the Palmer River watershed.

NRCS SERVICE CENTER OFFICE

WEST WAREHAM SERVICE CENTER
15 CRANBERRY HWY
WEST WAREHAM, MA 02576-1504

(508) 295-5151 ext 3

www.ma.nrcs.usda.gov

Environmental Quality Incentives Program (EQIP) is a voluntary program that provides financial and technical assistance to agricultural producers to plan and implement conservation practices.