ACEC Watershed Map

4,500 acres
11 ponds
2 rivers
Priority habitat
1800 homes
Priority Issues for HPWA

• Silt and Nutrient Runoff Prevention and Remediation
• Continuing Residential Development Pressures
• Low Resident Concern and Awareness
Issue 1: Silt and Nutrient Runoff Prevention and Remediation

- Pond shore clearing, development, hardscaping
- Lawn fertilizer runoff (N & P)
- Septic systems multiplying, aging, failing (N)
- Phosphorus (P) accumulation and release in sediments
- Pet waste; swan, waterfowl and turkey concentrations, etc.
Issue 2: Continuing Residential Development Pressures

• Land in Plymouth is lower cost than in communities further north (closer to Boston)
• Plymouth has 405 ponds, sandy glacial till soils
• Shoreline lots bring higher returns
• Sand and gravel is in hot global demand for construction and fracking
• Budgeting and politics encourage tax base expansion
Issue 3: Low Stewardship Concern & Awareness

• Most seem to have forgotten the water cycle
• Many are not aware what a watershed is, or that they live in one
• Few residents know this watershed is an ACEC
• Public access to even the MA Great Ponds is currently very limited
• Upland residents seem not to appreciate impacts of their actions on distant water bodies
Program 1: WQ Monitoring & Runoff Remediation

- Water quality sampling on Great and Little Herring Ponds - 9 years of data
- Partnering with Town of Plymouth on 2 remediation projects on Great Herring Pond
- Sampling involvement encourages HPWA members to volunteer for other projects
Program 2: Stewardship Advocacy and Education

- **Stewardship and Volunteer Action Guide**
- Networking with CPC, Open Space Committee, local allies, and donors
- Free public programs and eNewsletters
- Superhero herring comics
HPWA Citizen Science Species Monitoring

• Volunteer herring count at Sandy Pond Rd bridge (south end of Great Herring Pond)
• Bird walks with Brian Harrington – eBird
• Pine Barrens Plant ID (Irina Kadis & Alexey Zinovjev)
• Milkweed planting & Monarch Waystation
HPWA Citizen Science Watershed Monitoring & Education

- Pond water quality sampling
- Well water Isoscape Project sampling
- Charter high school internships
Citizen Science Project Promotion

• Social media (FB) sharing to encourage resident participation in area, regional and national projects such as:
  • Individual eBird reports
  • Great Backyard Bird Count
  • Umass Isoscape aquifer study – Tidmarsh Living Observatory
  • Monarch Watch – Journey North
  • Red-bellied cooter Headstart - SEMPBA
Recent HPWA Successes

Monitoring
• 2 remediation projects on Great Herring Pond in partnership with Town of Plymouth - total grant and match funding of $250K each

Educating
• Screech Owl and Bluebird nest box workshop (100 boxes built and placed)
• Second edition *Watershed Stewardship and Volunteer Action Guide* distributed directly to 2500 households
• Pine Barrens Plant ID Trail established at David E. Alper Nature Preserve – 30 species with QR-coded labels

Protecting
• Parcel 15, five acres along the Carter’s River (purchased by Plymouth CPC for conservation restriction)
• Preservation with CPC of 43.6-acres between Little Herring and Triangle Ponds, now the David E. Alper Nature Preserve
HPWA Future Goals

• Strategic recruitments to board of directors
• Increase youth involvement
• Expand committee participation
• Protect more land, water and species
HPWA - Special and Unique

• All-volunteer 501c3 charitable organization with 265 members/friends
• Active 13-person Board of Directors with eight standing committees
• Stewards of state-designated Area of Critical Environmental Concern (ACEC) comprising:
  – Priority habitats for several listed species of concern
  – 4500 acres in rapidly disappearing globally rare Coastal Pine Barrens eco-region
  – One of state’s largest river herring runs on a Sentinel River, with electronic species population monitoring spanning 20+ years
  – One of Plymouth’s 3 largest fully recreational pond
Join HPWA!
Contact Martha Sheldon, Membership Committee Chair
<martha.sheldon205@gmail.com>

HELP PRESERVE OUR

• FORESTS
• WETLANDS
• RIVERS
• PONDS
• NATIVE & MIGRATORY WILDLIFE