

Plymouth and Bourne, MA



# 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

#### **Membership Yearly Dues**

\$15 Individual Membership \$10 Family Membership \$55 Contributing Membership \$100 Sustaining Membership

Join today and send contributions to:

Herring Ponds Watershed Association P.O. Box 522 Sagamore Beach, MA 02562

