

## **Vernal Pool Talking Points (to help with landowner/ public conversations)**



*As of 2002, approximately 3,500 vernal pools have been certified in MA but over 30,000 potential vernal pools have been mapped.*

### **Threats to Vernal Pools:**

*Vernal pools are easily overlooked and at risk because they can be small in size, isolated, and they are dry for part of the year.*

- Habitat Loss
- Habitat Fragmentation (e.g. roads construction by VPs that limit species movement)
- Changing Hydrology
- Changing Water Chemistry
- Changing Substrate
- Changes in Vegetation
- Pest Control
- Climate Change

### **Value of Vernal Pools:**

- Flood control
- Water purification
- Carbon sequestration
- Wildlife habitat/water source
- Unique species

- Nursery for species that eat mosquitoes and other insects

[http://www.naturalheritage.state.pa.us/VernalPools\\_Threats.aspx](http://www.naturalheritage.state.pa.us/VernalPools_Threats.aspx)

[http://www.naturalheritage.state.pa.us/VernalPool\\_Management.aspx](http://www.naturalheritage.state.pa.us/VernalPool_Management.aspx)

[https://www.massaudubon.org/content/download/25763/423849/file/Vernal-Pools\\_Fact-Sheet.pdf](https://www.massaudubon.org/content/download/25763/423849/file/Vernal-Pools_Fact-Sheet.pdf)

[https://www.researchgate.net/publication/227245944\\_Protecting\\_vernal\\_pools\\_A\\_model\\_from\\_Massachusetts\\_USA](https://www.researchgate.net/publication/227245944_Protecting_vernal_pools_A_model_from_Massachusetts_USA)

### **Legal Protection for *Certified* Vernal Pools:**

- Wetlands Protection Act: protects CVPs and up to 100ft buffer *if* the CVP lies within a wetland resource area
- The Massachusetts Surface Water Quality Standards/ Massachusetts 401 Water Quality Certification Regulations: protects CVPs as Outstanding Resource Waters and protects against new or increased discharge into the CVP
- The Massachusetts Environmental Title 5: A system's septic tank and distribution box must be located a minimum of 50 feet, and the leaching field a minimum of 100 feet, from the boundary of a CVP (boundary delineated by DEP)
- The Massachusetts Forest Cutting Practices Act Regulations: Harvesting requirements limit cutting to no more than 50% of the trees within 50 feet of a CVP. They also require that trees or tree tops not be felled in CVPs, and restrict the use of pools as staging areas or skidder trails.
- Local Bylaws

<https://www.massaudubon.org/learn/nature-wildlife/reptiles-amphibians/vernal-pools/protecting>

<https://www.mass.gov/files/documents/2017/01/uw/vpcert.pdf>

[http://foxboroughma.gov/UserFiles/Servers/Server\\_15207780/File/Departments/Conservation/Vernal%20Pools%20&%20Wildlife/vp1.pdf](http://foxboroughma.gov/UserFiles/Servers/Server_15207780/File/Departments/Conservation/Vernal%20Pools%20&%20Wildlife/vp1.pdf)

### **National Amphibian Population Declines**

*The average decline in overall amphibian populations is 3.79 percent per year... If this rate remains unchanged, some species will disappear from half of the habitats they occupy in about 20 years.*

*More than 40 species of frogs, such as the Fowler's toad and spring peepers, are declining at a rate of 2.7 percent. If that pace keeps up, their populations will be halved in 27 years, the study said.*

[https://www.usgs.gov/faqs/why-are-frog-and-toad-populations-declining?qt-news\\_science\\_products=0#qt-news\\_science\\_products](https://www.usgs.gov/faqs/why-are-frog-and-toad-populations-declining?qt-news_science_products=0#qt-news_science_products)

[https://www.washingtonpost.com/national/health-science/frog-toad-and-salamander-populations-plummeting-us-survey-finds/2013/05/22/459c1c9e-c2f3-11e2-914f-a7aba60512a7\\_story.html](https://www.washingtonpost.com/national/health-science/frog-toad-and-salamander-populations-plummeting-us-survey-finds/2013/05/22/459c1c9e-c2f3-11e2-914f-a7aba60512a7_story.html)

**MA Wetland Loss overall**

[https://www.easton.ma.us/departments/conservation\\_commission/docs/Losing%20and%20Saving%20Wetlands%20Article.pdf](https://www.easton.ma.us/departments/conservation_commission/docs/Losing%20and%20Saving%20Wetlands%20Article.pdf)

[https://www.aswm.org/pdf\\_lib/state\\_summaries/massachusetts\\_state\\_wetland\\_program\\_summary\\_083115.pdf](https://www.aswm.org/pdf_lib/state_summaries/massachusetts_state_wetland_program_summary_083115.pdf)