Natural Heritage and Endangered Species Program

Massachusetts Endangered Species Act
Natural Heritage & Endangered Species Program

- Established in 1978 - Part of MassWildlife since 1983
- Protection of the state’s native biological diversity
- Highest priority: state-listed rare species

Listed Species

- 169 animals
- 258 plants

Species officially listed as:
- Endangered (E)
- Threatened (T)
- Special Concern (SC)
NHESP Conservation Tools: Land Protection

- Plan and select land for protection by the Division of Fisheries & Wildlife
- Advise Conservation Partners, Towns,
NHESP Conservation Tools: Habitat Management & Ecological Restoration

- Prescribed burning of fire-adapted habitats
- Invasive exotic plant removal

Kampoosa Bog ACEC, Stockbridge

Removing invasive exotic plants from rare limestone wetland
NHESP Conservation Tools: Education

BioMap2

Conserving the biodiversity of Massachusetts in a changing world

A Guide to Invasive Plants in Massachusetts

An Introduction to the Threatened Turtles of Massachusetts: Why They Need Our Help!

A Field Guide to the Animals of Vernal Pools
NHESP Conservation Tools: Data Management & Analysis

Track current and historical observations of state-listed species, and watch-list species
Maintain information on natural communities
Maintain information on certified vernal pools
Database contains over 19,000 geographically-referenced records
Example of information contained in NHESP database
NHESP Conservation Tools: Regulatory Review

• Review of proposed projects and activities for impacts to rare species under:
  • MA Endangered Species Act (MESA)
  • MA Wetlands Protection Act (WPA)
  • MA Environmental Policy Act (MEPA)
  • MA Forest Cutting Practices Regulations
Prohibits unauthorized Take - “means to ...harm, ...kill,...disrupt the nesting, breeding, feeding or migratory activity ....Disruption of nesting, breeding, feeding or migratory activity may result from, but is not limited to, the modification, degradation or destruction of Habitat.”

• Defines “Priority Habitat” and outlines delineation process
• Establishes review process, exemptions and grandfathering provisions
Wetlands Protection Act (WPA) & Rare Species

WPA Regulations – 310 CMR 10.37, 10.58(4)(b), 10.59

- Assess impacts to Wetland Resource Area Habitats for Rare Wetlands Wildlife
  - No review of state-listed plants
- Defines “Estimated Habitat”
- If in Priority Habitat but not Estimated Habitat...
  - Only needs MESA review
Review of Estimated & Priority Habitats

- State-listed Species Observed
- Species Habitat Delineated
- Species Habitats merged
  - Exclude developed areas
  - Drop records >25 yrs old
  - Consider MESA status
  - Exclude poor quality sites

- Review by Biologist
  - Note: Some Observation Points Rejected

- Acceptance into NHESP Database
  - Literature Search
  - Aerial Photo Interpretation
  - On-going Research Results

- Priority Habitat (& Estimated Habitat)

Species Habitats

Priority ( & Estimated ) Habitat
Priority vs. Estimated Habitat

**Priority Habitat (PH)**
- Geographic extent of habitat for all state-listed species
- Both plants and animals
- Codified under MESA

**Estimated Habitat (EH)**
- Geographical extent of habitat for state-listed wetland wildlife
- A sub-set of Priority Habitat
- No plants
- Codified under WPA
What does it mean if a project is in Estimated and or Priority Habitat?

Unless exempt, requires review under WPA and or MESA
MESA Exemptions

Exemptions – 321 CMR 10.14

- House additions, accessory structures, etc.
- Certain activities associated with stormwater management
- Maintenance or repair of paved roads
- Vegetation management along utility/rail lines
- Agriculture and certain non-commercial forest management
- Certain habitat management activities

Grandfathering Provisions – 321 CMR 10.13(2)
MESA / WPA Review Process

- MESA Checklist (Outside Estimated Habitat)
  - 30 days to determine if filing is complete
  - Additional 60 days for determination
  - Most reviews complete within 30 days

- Streamlined NOI (Estimated Habitat)
  - Submit NOI with required MESA info to NHESP
  - Most reviews complete within 30 days
  - OOC issued after receiving NHESP determination, includes any rare species conditions

“Pre-Filing Consultations”
MESA Review Outcomes

- Insufficient Information
  - May require habitat assessment, surveys or other information.

### Exempt / Grandfathered

- No “Take”

### “Take” – Avoided w/ Conditions
  - Timing restriction
  - Species protection plan
  - Protective ‘no touch’ zones

### “Take”

- Consult w/NHESP to redesign

- MESA Conservation & Management Permit
  - Allow “Take” + Mitigation

Spadefoot Toad (T)
Review Outcomes

Fiscal Year 18’
(July 2017 – June 2018)

- No Take = 59.5%
- Take Avoided w/Conditions = 37.3%
- Take (w/CMP) = 3.1%
WPA Review Outcomes

- Insufficient Information
- "No Adverse Effect"
- "Adverse" – Avoided w/ Conditions
  - Timing
  - Protective ‘no touch’ zones
  - Erosion control

Overcome presumption of "Adverse" with MESA Conservation & Management Permit

Diamond-backed Terrapin (T)
If a Project Results in a “Take”...

1. Assess alternatives to minimize impacts
2. Impact insignificant proportion of local population
3. Implement conservation & management plan providing long-term net benefit to species

321 CMR 10.23 – Performance Standards for Conservation & Management Permits

Diamondback Terrapin (T) (hatchling)
Conservation & Management Plan

• **Long-term net benefit** to species

• **Proportionate to harm / species**
  • Mitigation ratios (321 CMR 10.23(7))

• **May include:**
  • On / off-site habitat protection
  • On / off-site habitat restoration / management
  • Funding for conservation and or research

“... better off”
Example Take and CMP

- Original Project = 9ac
- Revised Project = 7ac
- Mitigation (2:1) = 14ac
  - 2 acres on-site (avoided majority of plants)
  - 12 acres off-site, abutting other open space

Allows development and protects rare species.
Example Project

• ~185 acre site with in Blanding’s

• Habitat Requirements:
  • variety of wetland & terrestrial habitats
  • large tracts of land (travel long distances)

• Key Threats:
  • habitat loss & degradation
  • habitat fragmentation
  • road mortality

Original project proposal = fragmentation of large landscape
After

- Reduction of fragmentation
  - emergency access rd
- Land Protection
  - ~ 75 acres to Town
  - ~ 70 acres in CR
- $60K conservation funding
QUESTIONS?