

West Britannia and Barstow's Pond Dam Removals: Data / Information Sharing Plans

Data from diadromous fish monitoring in the Mill River watershed

The West Britannia Dam Removal Project, led by the MA Division of Ecological Restoration (DER), will generate environmental information including the occurrence, abundance, and population structure of alewife and blueback herring and elver and yellow phase American eel in the lower and upper Mill River watershed. Data collection will occur in three phases: 1) just downstream from West Britannia Dam, prior to that dam's removal; 2) at the Morey's Bridge Dam fish ladder, once passage is established to that point; and 3) at telemetry stations upstream from Morey's Bridge Dam fish ladder (after passage through the Morey's Bridge Dam fish ladder is demonstrated). Data collection will begin in the spring of 2013. The telemetry study will be completed in 2016. Monitoring at the Morey's Bridge Dam fish ladder will continue indefinitely as part of MA DMF's long term herring monitoring of the Taunton River watershed. Datasets will provide river herring species and length; numbers of American eel using the eel pass at Morey's Bridge Dam and numbers of yellow phase eel caught in eel pots in Lake Sabbatia; and observational data on which areas of the upstream portions of the watershed are used by river herring, providing an estimate of the extent of actual river herring habitat added by passage remediation. Data will be collected by MA DMF following protocols described in this proposal. Data will be transferred from field data sheets and stored as XLSX spreadsheets. All XLSX spreadsheets will be stored on a MA DMF server with daily backup and stored indefinitely. Video files will be recorded as MP4 files and downloaded from field computers at least twice per week. Video files will then be transferred to an external hard drive at MA DMF. Backup copies of all video files will be created upon transfer and stored on a second external hard drive. All video files will be stored for a period of at least one year.

MA DMF plans to produce reports annually on the results of each year's monitoring for review and comment by the project partners. After passage has been allowed for five years, a period slightly longer than the generation time of river herring, MA DMF will prepare a comprehensive report for the project partners and potentially, a manuscript for dissemination in the scientific literature. Data will be available to the public upon request starting in 2015, or one year after data collection begins. For more information, or to request data, please contact Dr. Michael Bednarski, MA DMF, at mike.bednarski@state.ma.us or 508-990-2860 x114. MA DMF frequently shares similar information through agency reports, conferences, and peer-reviewed publications.

Data from the fish monitoring will also be used to fill out the Tier 1 Monitoring form required by NOAA, specifically the presence or absence of target species before and after the project. The Tier 1 Monitoring form will be stored on a DER server with daily backup and stored indefinitely. The Tier 1 Monitoring form will also be provided to the NOAA Restoration Center.

Data from fish presence-absence monitoring in the Cotley River

The Barstow's Pond Dam Removal Project will produce environmental data including the presence / absence of diadromous fish after the dam is removed as well as a description of other fish species present at the site. Fish surveys will be completed by Commonwealth employees or

qualified private contractors using Massachusetts Division of Fisheries and Wildlife protocols. Data will be transferred from field data sheets into spreadsheets for storage and analysis at DER. Data will be shared with the project partners and will be available to the general public one year after the dam is removed. Data from the presence-absence monitoring will also be used to fill out the Tier 1 Monitoring form required by NOAA. All data and the Tier 1 Monitoring form will be stored on a DER server with daily backup and stored indefinitely. The Tier 1 Monitoring form will also be provided to the NOAA Restoration Center. For more information, or to request data, please contact Beth Lambert, DER, at beth.lambert@state.ma.us or 617-626-1526.

Data from as-built surveys at West Britannia and Barstow's Pond dam removal sites

Both West Britannia and Barstow's Pond Dam Removal Projects will generate as-built surveys of the dam removal sites, including topographic data in CAD format. The data will be analyzed to determine whether the project as constructed deviates from the engineering plans, and if so, whether fish passage or other important design components are impacted by the differences.

CAD data from the as-built surveys will be used for analysis together with the CAD data from the original designs to fill in the required Tier 1 Monitoring form in the Site "Passability" category. All CAD data and the Tier 1 Monitoring form will be stored on a DER server with daily backup and stored indefinitely. The Tier 1 Monitoring form will also be provided to the NOAA Restoration Center.