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Historical Comparison of Migratory Fish Returns to the Connecticut River from 2000-2007 Using GIS

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Historical Comparison of Migratory Fish Returns to the Connecticut River from 2000-2007 Using GIS Bates College Department of Geology Introduction Selected Tributaries & Dams encompasses approximately 28,500 16. Nulhegan R square kilometers making it the largest averages 12-30 inches river ecosystem in New England 18. Stevens R. 19. Wells R. Enfield Dam (Breached) (Commonwealth of Massachusetts, 20. Waits R 2010). The Connecticut River Watershed Turners Falls Dam includes the states of NH, VT, CT, and Ballows Falls Dam MA (Commonwealth of Massachusetts, 2 McIndose Station Dam Gilman Project Dam 2010). The Connecticut River begins at 3 Groveton (Wyoming) Dam (breachea the Fourth Connecticut Lake on the border 20 First CT Lake Dam of Canada and flows approximately 21 Second CT Lake Dam 660 km to Old Saybrook, CT where it There are over 1,000 dams in empties into the Long Island Sound. By the time the river reaches the northern border of Massachusetts, it has descended approximately 58 meters (Connecticut 2007 River Joint Commissions, 2010). Results 2006 Atlantic Salmon, 2000-2007 0.00 - 22.00 2005 110.01 - 132.00 1:58,000 2002 2007 American Shad, 2000-2007 0.00 - 62425.00 **124850.01 - 187275.00 187275.01 - 249700.00 2**49700.01 - 312125.00 312125.01 - 374550.00 2005 2004 Conclusions Atlantic Salmon returns to the Holyoke Dam increased each year after 2001 until decreasing slightly BATES COLLEGE 2003 between 2006 and 2007. The highest count occurred in 2005 with approximately 132 returns. American Shad returns to the Holyoke Dam increased until 2002, and then began to drop off until 2006. The highest count occurred in 2002 with approximately 374,548 returns. Between 2006 and 2007, American Shad returns began to increase slightly. Returns to the other dams remained fairly constant for both species. 2002 Sources Commonwealth of Massachusetts, 2010: http://www.mass.gov/?pageID=eoeeaterminal&L=4&L0=Home&L1=Air%2C+Water+%26+Climate+ www.fws.gov/r5crc/stuff/map.html www.matthewcelia.com/sipt/?p=100 Change&L2=Preserving+Water+Resources&L3=Massachusetts+Watersheds&sid=Eoeea&b=terminal www.rkgprojects.com/2005photos/thumbnails.html www.lefthandedliving.com/2008 02 01 archive.html content&f=eea water connecticut&csid=Eoeea. **Subdrainage figure:**

American shad - Alosa sapidissima

averages 14-29 inches

www.birdingmaine.com/trip-report-3-landscapes.htm

www.fotopedia.com/en/Connecticut River

www.fws.gov/r5crc/stuff/subdrain.html

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www.commons.wikimedia.org/wiki/File:Cole-Thomas_The_Oxbow_(The_Connecticut_River_near_Northampton.1836.jpg

Connecticut River Joint Commission, 2010:

http://www.crjc.org/facts.htm