

GIS COVERAGE DOCUMENTATION

Coverage Name(s): WHYDRO, EHYDRO

Theme: Migratory pathways of anadromous fishes in Maine

Type/Format: ARC/INFO arc and polygon coverage

Projection: UTM Zone 19, NAD27

Automation Date: June 1994

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Source(s) of Data:

Publication: Eipper, A., W. Knapp, and C. Laffin, eds. 1982. Anadromous fish streams of New England: upstream migratory routes. Portfolio NE-1. U.S. Fish and Wildlife Service, Boston, MA.

USGS 1:100,000 hydrography of Maine obtained as ARC/INFO coverages from Maine Office of GIS.

Description:

WHYDRO and EHYDRO coverages show all rivers, islands, and lakes from the 1:100,000 hydrography. The original 1:100,000 coverages were joined to form 2 coverages, WHYDRO containing data for the western part Maine, and EHYDRO containing data for the eastern part. Arcs with the same hydrography coding were joined to drop excess nodes and major/minor fields were dropped where they were not needed. Accuracy of original coding was not checked by this office. MINOR1 codes of '202', '203', and '204' were added or modified where needed (see key to hydrography codes below).

Data on habitat use by ten species of anadromous fish were entered as arc attributes. Three fields (EXISTING, PROGRESS, PROPOSED) were added to the arc attribute table and used for indicating the migratory pathways of anadromous fish. Where species-specific information was available in the original data source, each stream and lake arc was coded to indicate species absence (no entry in EXISTING, PROGRESS, or PROPOSED fields) or presence (species code in EXISTING field). See table below for species codes. Streams and lakes in the process of being restored

for anadromous fish were coded with 'R' in the PROGRESS field and streams and lakes proposed for restoration were coded with 'R' in the PROPOSED field. An uncertain status ('U' in EXISTING) was applied to streams and lakes in cases where they were highlighted in the original publication as an existing run but a species code was not clearly assigned. Island arcs were coded the same as the lake or river shoreline within which they were contained. For instance, if a lake was coded as an existing salmon run, all island arcs within the lake were also coded as an existing salmon run.

Species codes:

- A** - Atlantic Salmon (*Salmo salar*)
- B** - Sea Run Brook Trout (*Salvelinus fontinalis*)
- C** - Sea Run Brown Trout (*Salmo trutta*)
- D** - Rainbow Smelt (*Osmerus mordax*)
- E** - American Eel (*Anguilla rostrata*)
- F** - Shortnose Sturgeon (*Acipenser brevirostrum*)
- G** - Atlantic Sturgeon (*Acipenser oxyrinchus*)
- H** - Alewife (*Alosa pseudoharengus*)
- J** - Blueback Herring (*Alosa aestivalis*)
- N** - American Shad (*Alosa sapidissima*)

Hydrography codes:

Attribute table for AAT:

<u>MINOR1</u>	<u>DESCRIPTION</u>
116	Coastline
201	Manmade shoreline
202	Closure line to fix errors of merging 1:100k USGS coverages; approximates actual hydrography
203	Closure line to reduce polygon size, close off polygons at edge of quad, or separate polygons where necessary
204	Closure line with same criteria as 203 with coincident feature - Maine/New Hampshire border.
300	Spring
400	Rapids
401	Falls
406	Dam
412	Single line stream
415	Aqueduct
421	Lake or pond shoreline
605	Right river bank
606	Left river bank
610	Intermittent stream
<u>MINOR2</u>	<u>DESCRIPTION</u>
200	Shoreline (dbl line stream and lake/pond)
201	Manmade shoreline

<u>MINOR3</u>	<u>DESCRIPTION</u>
17	Coincident feature - Transportation

Attribute table for PAT:

<u>MINOR1</u>	<u>DESCRIPTION</u>
116	Coastline
200	Island
201	Manmade lake or pond
412	Perennial stream
414	Canal polygon
421	Lake or pond

Data Restrictions:

There are no restrictions on redistribution of this data set, however, secondary distribution must have this documentation appended. Credit should always be given to the source and automation agency when the data is transferred or printed.

Status:

These coverages are intended as basic information for knowledgeable parties to review and update. They represent distributions of anadromous fish in Maine as of 1982. Comments made on digital and hard copies will be incorporated into final coverages, which will be available from this office and/or Maine Office of GIS.