

Notes for Power Point: Journey down the Hudson River

Slide	Notes	Additional Notes
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4	An estuary is the word we use to describe the place where salt water meets fresh. The freshwater of the Hudson empties into the salty Atlantic Ocean. Due to the topography of the region and tidal action, the estuarine portion of the river is not limited to the lowest reaches of the river. All of the lower Hudson is considered to be estuarine, with the 'salt front' (the leading edge of ocean water entering the estuary) reaching to Beacon or even Poughkeepsie in late summer of dry years.	
5	The Hudson is tidal all the way up to the Troy dam. Images: Map (Google Satellite); Peekskill tides (Cary Institute).	
6	You will often hear people talking about different parts of the River: the upper Hudson, which runs from Mt. Marcy to Troy, the Mohawk, which runs from Rome to Troy, and the lower Hudson, from Troy to New York Bay. These refer to the three main sub-basins of the Hudson River watershed. Ask: In which sub-basin do we live? Or, if you do not live within the watershed, which sub-basin is closest? Have a student point out your location on the inset river map, the watershed map, and the NY State map. Image from USGS.	
7	In the Adirondacks, the river is surrounded by forest and metamorphic rocks, making the water clear and cold.	
8	The Federal Dam at Troy halts the tidal action of the river. The 'estuary' starts here and continues to the harbor in New York City.	
9	As you move into the lowlands, the river becomes wider and deeper.	
10	And as it continues further south, the surroundings become more developed...	
11	...until the river reaches its most urban portion and its last stop – the Atlantic Ocean.	
12	Background image used with permission from Jeff Anzevino. Inset boat/lighthouse used with permission from Cornelia Harris.	
13	Image owned by and used with permission from Scenic Hudson.	
14	Image credits: Bald eagle (Cornelia Harris); American goldfinch, wood duck, least bittern (Alan W. Wells); Bosmina, phytoplankton (Stuart Findlay); Beaver (Steve Hersey, Flickr CC); Atlantic sturgeon (unknown; public domain)	

15	<p>Remind students that the real world works as a food web, but a pyramid can be a helpful when beginning to think about what eats what and why.</p> <p>Images from Cary Institute (Background, invertebrates & producers) & the NYSDEC (vertebrates).</p>	
16	<p>The Hudson River is important habitat for diadromous (<i>di=two, dromous= direction</i>) fish, which migrate between fresh and marine waters. Anadromous fish, like Atlantic sturgeon and blueback herring, spend most of their lives in salt water and come back to freshwater to spawn.</p> <p>Catadromous fish, like the American eel, spawn in salt water, then spend most of their lives growing up in fresh water.</p> <p>Images by NYSDEC.</p>	
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