DRBC RFAC Meeting Lake Wallenpaupack Environmental Learning Center - Hawley, PA. December 3, 2015

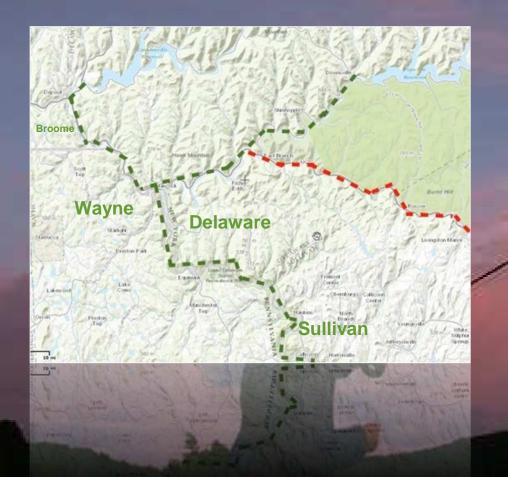
Cooperators and Funders

Delaware County Department of Economic Development and Friends of the Upper Delaware River

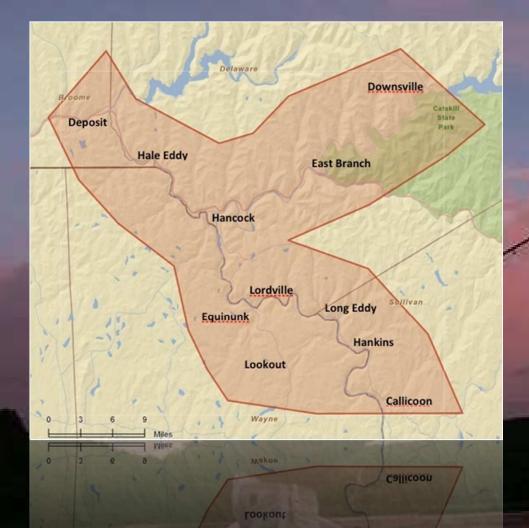


Town of Hancock





- Direct economic contributions of cold water fishery today
- Indirect benefits (e.g., 2nd home impacts)
- Impacts of release regimen on fishing industry economy
- Potential economic gains from more consistent release regimen



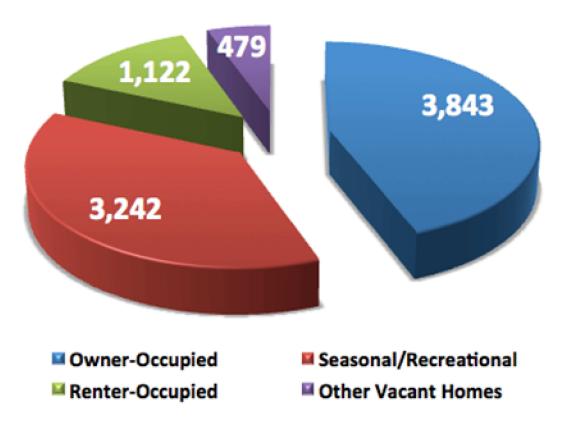
- 28 miles of main stem (Callicoon to Hancock)
- 33 miles of East Branch (Hancock to Downsville)
- 17 miles of West Branch (Hancock to Deposit)
- 78 miles of cold water fishery impacted by releases from Cannonsville and Pepacton reservoirs

Impacted Area Business Summary

	Businesses		Employees	
NAICS Codes	Number	Percent	Number	Percent
Agriculture, Forestry, Fishing & Hunting	53	7.3%	113	1.9%
Food & Beverage Stores	12	1.7%	75	1.3%
Gasoline Stations	3	0.4%	13	0.2%
Sport Goods, Hobby, Book, & Music Stores	9	1.2%	19	0.3%
Miscellaneous Store Retailers	21	2.9%	43	0.7%
Arts, Entertainment & Recreation	13	1.8%	40	0.7%
Accommodation	25	3.5%	126	2.1%
Food Services & Drinking Places	33	4.6%	97	1.6%
Total	169	23.4%	526	8.8%
Total of Potentially Impacted Businesses	169	100%	526	100%

Source: Copyright 2013 Dun & Bradstreet, Inc. All rights reserved. ESRI Total Residential Population

Impacted Area Housing



Expenditures Per Day/Trip

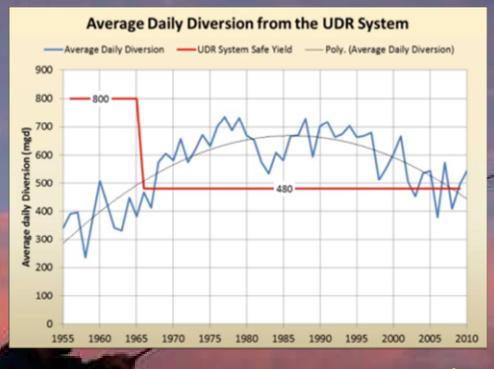
- US Fish & Wildlife (2001) \$53/trip (2010 \$'s)
- University of Minnesota (1990) \$41.25 (resident), \$22.03 (non-resident)
- US Fish & Wildlife Shad Study (1986) \$25.50 per trip
- Cornell University (1981) \$56.70/day/group (all recreation)
- NPS River Study (1989) \$19.42 (all river recreation)
- NPS Money Gen. Mod. (1997) \$70.72/lodging, \$43.95/meals (all travel)
- North Carolina Trout Study (2009) \$103/day
- University of Minnesota (2002) \$29.37/day at home & \$56.57 away
- US Fish & Wildlife (2011) \$55/trip
- NYS Anglers Survey (2007) \$28/trip residents/\$90/trip non-residents

Other Key Economic Facts

- Fresh water anglers in New York spend roughly 16 days per year fishing and spend approximately \$879 per year. Roughly 20% each is spent on lodging, food and transportation (gasoline), with the remainder going for other supplies and services.
- Some 89% of anglers come from metro areas, and 38% come from large metropolitan areas such as New York City. Fishing is also the primary reason visitors to the Delaware River region head to Delaware County.
- There are direct, indirect and induced economic impacts from spending on fishing. Multiplier effects can be segregated into these and other categories and range from a factor of 1.30 to 2.53. NPS estimates 1.84 for gross output on a local basis and 2.01 on a statewide basis.

What's A River Worth? (Based on existing data sources before adjustments for unique value)

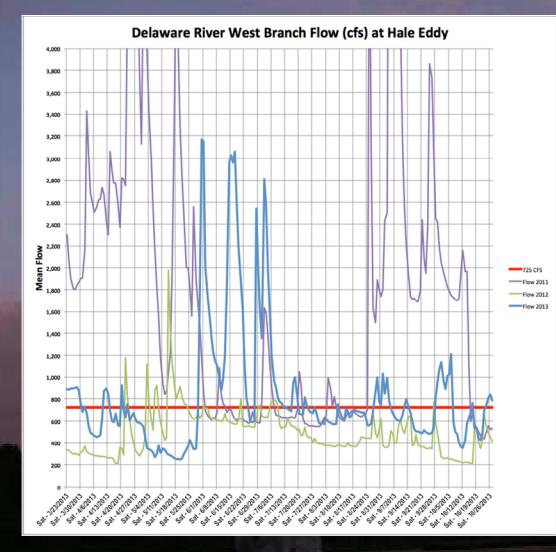
Current Estimated Non-Property Value of Local Fishing Economy					
	Estimated Angler Days	Estimated Expenditures at Location	Indirect & Induced Value (Local)	Total Value	
New York			16 E E		
East Branch	56,152	\$1,917,912	\$1,611,046	\$3,528,958	
West Branch	96,365	\$3,291,416	\$2,764,790	\$6,056,206	
Delaware River	42,739	\$1,459,766	\$1,226,204	\$2,685,970	
Total New York	195,256	\$6,669,094	\$5,602,039	\$12,271,134	
Pennsylvania	139,104	\$4,751,182	\$3,990,993	\$8,742,175	
Totals	334,359	\$11,420,277	\$9,593,032	\$21,013,309	



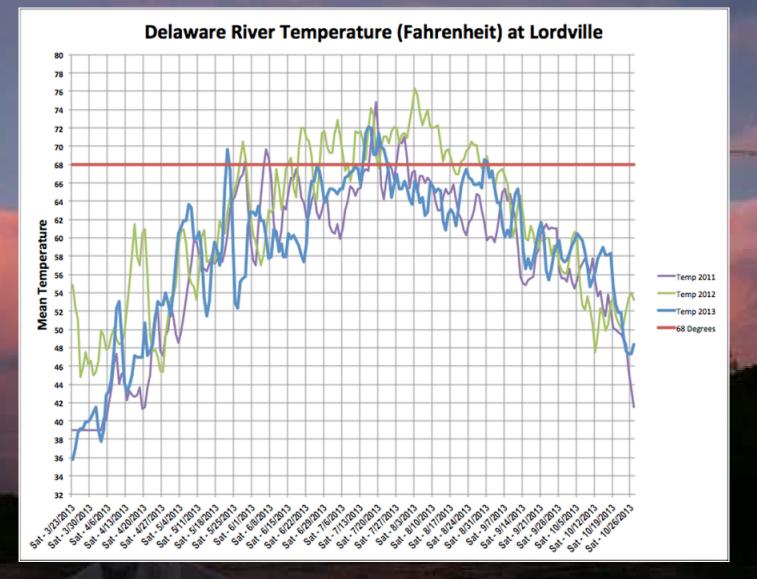
Current fishing economy generates gross output of \$21 million. Net present valued over 20 years at a 5% discount rate, this represents a \$261.9 million value with a minimum of another 25% or \$65.5 million of value to be had from consistent reservoir water releases.

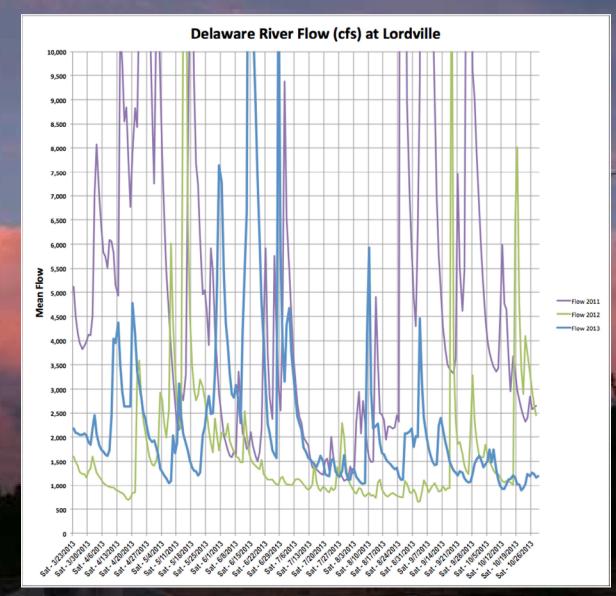
Impacts on Property Values

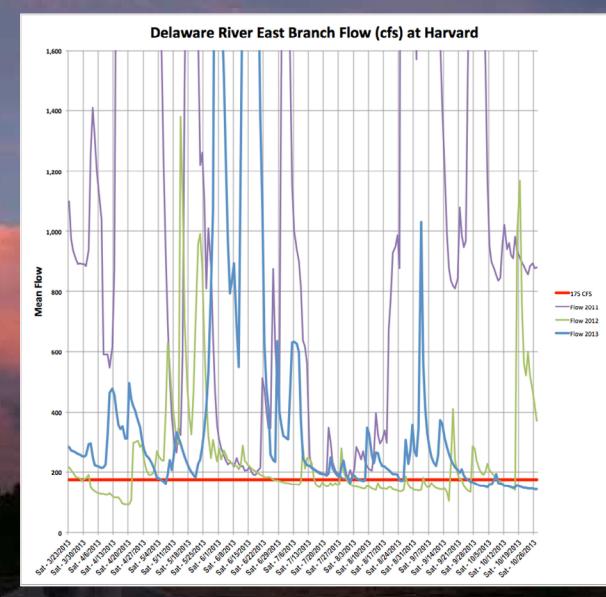
- 3,242 or 37% of all housing units in the impacted area are second homes and these are occupied by households focused on recreation as a pursuit while staying in the area. Housing units within the impacted area have a current estimated average value of \$115,152 according to ESRI.
- Second home value is relative to recreational use, and NPS data indicates 29.2% of those headed to that portion of the river between Callicoon and Hancock were there to fish, indicating the 947 of 3,242 second homes in the impacted area represent a total value of \$109.0 million attributable to the fishing sector.



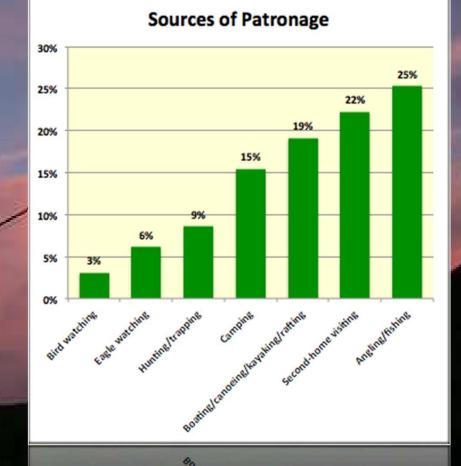
There were 15 weekends in 2013, 26 in 2012 and 3 in 2011 during which the weekend flows were lower than 725 cfs or immediately preceded by such low flows that would lead anglers to expect poor weekend fishing conditions.



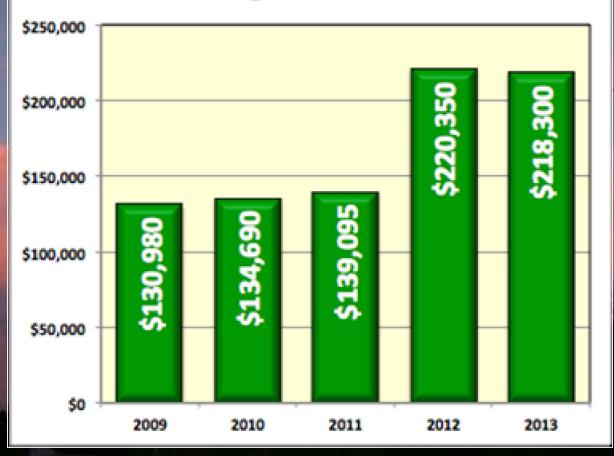




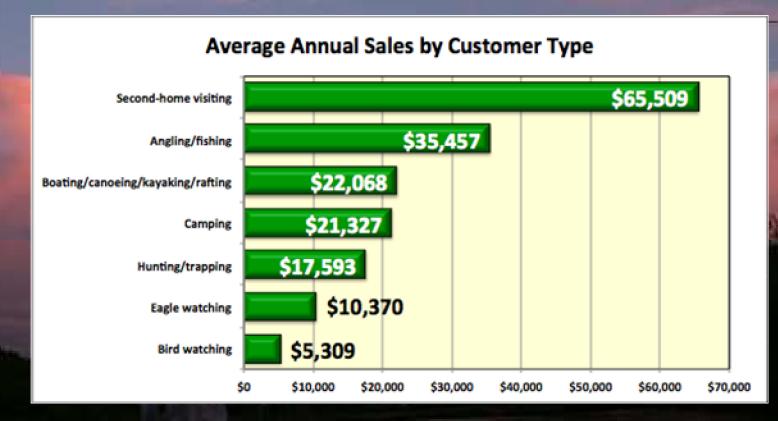
- The typical business impacted has been in existence approximately 15 years.
- The average amount of land owned by respondents was 116 acres, although the range was wide; from one acre to well over 1,000.
- Businesses were asked "How much of your customer base is related to each of the following activities, in your estimation? That is to say, how many of your customers do you estimate come to the area for these activities and, in the course of their visits visit your business or use your services, regardless the services you provide directly relate to these activities or not?"



Average Annual Sales



Sales, allocated by the proportions business respondents attribute to various types of recreation, indicated the following average expenditures per year, fishing and boating accounting for an average total of \$57,525 of spending at each business



Average Annual Expenses by Category

Category	Amount
Advertising and marketing	\$7,515
Entertainment expenses	\$1,505
Food and beverages	\$29,467
Insurance	\$9,405
Labor expenses	\$29,160
Maintenance and repairs	\$8,614
Rent (land, buildings or equipment)	\$4,960
Retail goods for resale	\$5,500
Taxes (sales & other)	\$21,409
Transportation/vehicular expenses	\$7,874
Utility expenses	\$5,061
Other and miscellaneous	\$3,904
Total	\$134,372

Total Capital Expenses, Last 5 Years

Category	Amount
Buildings	\$53,222
Equipment	\$17,389
Land	\$3,500
Other and miscellaneous	\$28,571
Total	\$102,683

Total Capital Expenses Planned, Next 5 Years

Category	Amount
Buildings	\$26,429
Equipment	\$37,286
Land	\$84,167
Other and miscellaneous	\$85,929
Total	\$233,810

- Impacted businesses spend an estimated 83% of their operating expenditures and 82% of their capital expenditures within Broome, Delaware, Sullivan or Wayne Counties.
- Impacted businesses are drawing new dollars into the region with 81% coming from outside it to experience recreational opportunities in the area.
- The typical business employs an average of 6.3 full and part-time workers.

Customers by Region Category Share Home county 7% Adjoining counties 12% Elsewhere in Pennsylvania 11% Elsewhere in New York 36% **New England** 6% **New Jersev** 17% Other states 8% Other countries 1% Total 100%

What's A River Worth? \$414 million

(and \$274 million more with a little help from our friends)

