

2005 NOAA Fisheries Employee of the Year Nomination Narrative

NOMINEE: Katie A. Barnas

Program Employees – Management/Scientific/Technical

Ms. Katie Barnas is one of the people at the Northwest Fisheries Science Center who makes projects happen. She has been an instrumental player in several efforts in the last year – without Katie's efforts these projects would not have succeeded. On behalf of myself and Drs. Chris Jordan, Steven Katz and many others at the Northwest Fisheries Science Center, I wish to nominate Ms. Katie Barnas for a 2005 NOAA Fisheries Employee of the Year Award.

In the past year, Katie has played a major role in several large scale projects. The common goal of these projects is to provide sound science for recovery of threatened and endangered salmon. Through her contributions, Katie has enhanced stewardship of NOAA Fisheries protected species and their habitats, published accurate and reliable scientific results, heightened staff morale, improved public appreciation for the mission of the agency, and strengthened ties to regional state, federal and local entities. Following are summaries of the critical projects to which Katie has made tremendous contributions in the past year.

Project 1: National River Restoration Science Synthesis and the Pacific Northwest Database (published in Science): The National River Restoration Science Synthesis (<http://www.nrrss.umd.edu/>) is a group of academics and graduate students from 7 regions of the country working to compile information on restoration activities throughout the US. For the Science paper, Katie and collaborator Dr. Steve Katz contributed a database of restoration projects intended to improve stream and river habitat throughout the Pacific Northwest. The database was designed specifically to address the needs of regional monitoring programs that evaluate the effectiveness of restoration actions. The database currently contains spatially referenced, project-level data on over 23,000 restoration actions initiated at over 35,000 locations in the last 15 years (98% of projects report start or end dates in the last 15 years) in the states of Washington, Oregon, Idaho and Montana, USA. Data sources included Federal, State, local, NGO, and tribal contributors. Combined, the data Katie contributed to this collaboration accounted for 62% of the total national data set.

Bernhardt E. S., M. A. Palmer, J. D. Allan, G. Alexander, K. Barnas, S. Brooks, J. Carr, S. Clayton, C. Dahm, J. Follstad-Shah, D. Galat, S. Gloss, P. Goodwin, D. Hart, B. Hassett, R. Jenkinson, S. L. Katz, G. M. Kondolf, P. S. Lake, R. Lave, J. L. Meyer, T. K. O'donnell, L. Pagano, B. Powell, E. Sudduth. 2005. Synthesizing U.S. river restoration efforts. *Science* 308(5722):636-637.

Jenkinson, R, K Barnas, J Braatne, E Bernhardt, M Palmer, D Allen, and the NRRSS team. 2006 "Stream restoration databases and case studies: a guide to information resources and their utility in advancing the science and practice of restoration" *Restoration Ecology* 14(2): x-x.

Katz, S., Barnas, K., Hicks, V. R., Cowen, J., Jenkinson, R. (*In Review*). Freshwater habitat restoration actions in the Pacific Northwest: a 10-year census. *Restoration Ecology*.

McFall, J., S.L. Katz., K. Barnas, M. D. Morehead, R. Jenkinson, S. R. Clayton, P. Goodwin (*In Review*). Stream Restoration in the Pacific Northwest: Analysis of Interviews with Project Managers. *Restoration Ecology*.

Project 2. Designing a regional data system that can service the additional information needs of project tracking for effectiveness monitoring and evaluation (M&E). Katie has been an important component of a team at the NWFSC (w/ S. Katz & S. Toschach) that has developed a dynamic database of spatially explicit information on aquatic habitat restoration projects in Oregon, Washington, Idaho and Montana. The completion of this project represents a monumental effort undertaken two years ago by Katie and collaborators. This database is critically important for large scale recovery planning efforts since it is the only regional-scale tool to assess the overall cumulative impact of the numerous ongoing habitat

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restoration programs and projects. In the future, this data management system will serve as the regional standard for tracking restoration efforts. The data management system includes data definitions, relationships between data elements and crosswalks with diverse data systems in the region. Katie's work on this project has produced the only mechanism for tracking public investment in habitat improvement projects over the entire Pacific Northwest and the recovery domains of endangered and threatened salmonids in particular. This project greatly increases our, and our co-manager partners', ability to plan and prioritize restoration actions for freshwater salmonid habitat.

Project 3: Nonnative species in the Pacific Northwest: Nonnative species in the Pacific Northwest have been overshadowed by discussions of hatcheries, harvest, habitat and hydro-system impacts on threatened and endangered species. In collaboration with scientists from University of Washington and NOAA Fisheries, Katie has been working to alert the scientific and management communities about the importance of non-natives in this region. She has contributed four chapters to a newly published book (reference below) and has co-authored a manuscript synthesizing non-native species distributions and impacts on fishes in the Pacific Northwest (in review).

Barnas, K. 2006 (in press) *American Shad, Catfish (Channel Catfish, Brown Bullhead, Black Bullhead), Warmwater Bass (Smallmouth Bass, Largemouth Bass, Rock Bass), and Temperate Bass (White Bass and Striped Bass)* in Boersma, P. D., S. E. Reichard, and A. N Van Buren, eds. *Invasive Species in the Pacific Northwest*. Seattle and London: University of Washington Press.

Project 4: Caspian Tern Management: Native species also pose problems for threatened and endangered salmonids, and Katie has worked with Dr. Thomas Good and others to evaluate the impact of Caspian Tern colonies on threatened and endangered salmonids in the Columbia River estuary. This effort involved working with science center and regional office staff, as well as local scientific experts.

NMFS (Good, T. P., K. Barnas, D. M. Marsh, M. M. McClure, B. Ryan, B. P. Sandford, E. Casillas). 2005. NOAA Fisheries Report: Caspian Tern Predation on Juvenile Salmonid Outmigrants in the Columbia River Estuary. Appendix C in USFWS (2005) Caspian Tern Management to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary, Final Environmental Impact Statement. U.S. Fish and Wildlife Service Migratory Birds and Habitat Programs, Portland, OR. January, 2005.

Awards and Service: In addition to the above contributions, Katie has provided invaluable support for a variety of other NOAA Fisheries efforts. First, she is an enthusiastic and dedicated member of our education and outreach committee and has assisted with and developed outreach activities for our NOAA science camp, visited the Laurelhurst Elementary 2nd grade class and contributed to the Ravenna Park Explorers Nature Camp. She has provided logistical support instrumental to several large workshops, conducted peer review of scientific manuscripts, and offered her time to develop presentation materials for NWFSC scientists. Katie has been recognized by the Seattle Federal Executive Board for her public service and was awarded "Outstanding Federal Employee."