CURRICULUM VITAE

J. Todd Petty (link to website)

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EDUCATION

1998 - PhD in Forest Resources - Warnell School of Forest Resources, University of Georgia, Athens, GA

1994 - MS in Forest Resources - Warnell School of Forest Resources, University of Georgia, Athens, GA

1990 - BA in Biology - College of Arts and Sciences, University of Virginia, Charlottesville, VA

PROFESSIONAL EXPERIENCE

2015 – present Associate Dean of Academic Affairs (in brief, detail of activities following)

Davis College of Agriculture, Natural Resources & Design, West Virginia University, Morgantown, WV

The academic affairs (AA) office is comprised of the associate dean, seven professional staff, and two graduate assistants. As associate dean, I manage this staff, and I work with division directors (department chairs) and faculty program coordinators to coordinate all undergraduate and graduate level academic programming in the college. This includes 21 BS level, 18 MS level and 7 PhD level degrees. The AA office also facilitates development of online courses and coordinates all online curricula. The AA office is responsible for program assessment and accreditation, new student recruiting, orientation, advising, student retention, student records, graduation, career services, tutoring and success coaching, college level scholarships and travel grants, and alumni relations. The AA office also houses the Davis College Leadership Academy, which is committed to training and mentoring the next generation of leaders in agriculture, natural resources, and design. All activities of the AA office are integrated into eight college-wide faculty working committees.

2010 – 2018 Director – Peace Corps Masters International Program in Sustainable Agriculture and Forestry

Davis College of Agriculture, Natural Resources & Design, West Virginia University, Morgantown, WV

The PCMI program links WVU graduate students in the Davis College to Peace Corps service. I developed this program at WVU, and my role as director is to link interested students with faculty advisors, and also manage students through the Peace Corps application and service process. We currently have 12 students in the program, either on-campus or overseas. Peace Corps assignments have taken our students to places like Peru, Morocco, Jamaica, and Zimbabwe. One of our students won a 2013 national service award from the Peace Corps.

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2010 – 2017 **Director – National Council for Science and the Environment, EnvironMentors, WVU Chapter**West Virginia University, Morgantown, WV

The EnvironMentors program is a national high school student research and mentoring program administered by the National Council for Science and the Environment. WVU is one of 13 university chapters that include LSU, NCSU, CSU, and UC Davis. At WVU we link high school students (20 per year) to WVU graduate student mentors (1-on-1 mentoring). The graduate student mentors undergo rigorous mentoring and leadership training. The high school participants undertake independent research projects that they present at a spring chapter science fair. The top three winners of our chapter fair travel to Washington, DC to compete in a national fair. Each year we had at least one student win 1st or 2nd place at the national fair. Our chapter won the 2013 best chapter award, and our mentors have won best mentor awards twice.

2010 – 2015	Associate Director – Environmental Research Center Davis College of Agriculture, Natural Resources & Design, West Virginia University, Morgantown, WV
2012 – present	Professor of Fisheries and Aquatic Sciences School of Natural Resources, Davis College of Agriculture, Natural Resources & Design, West Virginia University, Morgantown, WV
2006 – 2012	Associate Professor of Fisheries and Aquatic Sciences Division of Forestry and Natural Resources, Davis College of Agriculture, Natural Resources & Design, West Virginia University, Morgantown, WV
2000 – 2006	Assistant Professor of Fisheries and Aquatic Sciences Division of Forestry and Natural Resources, Davis College of Agriculture, Forestry & Consumer Sciences, West Virginia University, Morgantown, WV
1999 – 2000	Postdoctoral Research and Teaching Fellow Division of Forestry and Natural Resources, Davis College of Agriculture, Forestry & Consumer Sciences, West Virginia University, Morgantown, WV
1995 – 1998	Graduate Research Assistant (PhD student) Warnell School of Forest Resources, University of Georgia, Athens, GA Thesis: Mottled sculpin in a dynamic landscape: from individual behaviors to population regulation
1992 – 1994	Graduate Research Assistant (MS student) Warnell School of Forest Resources, University of Georgia, Athens, GA Thesis: Patch selection by mottled sculpin
1991 – 1992	Fisheries Biologist Virginia Department of Game and Inland Fisheries, Richmond, VA
1990 – 1991	Field Technician / Chesapeake Bay resources

Maryland Department of Natural Resources, Annapolis, MD

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HONORS

Outstanding University Chapter - 2013 - NCSE EnvironMentors Program

Outstanding Teacher - 2010 - WVU Davis College of Agriculture, Natural Res. and Design

Outstanding Teacher - 2010 - WVU Division of Forestry and Natural Resources

Outstanding Researcher - 2009 - WVU Davis College of Agriculture, Natural Res. and Design

Outstanding Researcher - 2009 - WVU Division of Forestry and Natural Resources

Outstanding Service Provider - 2008 - WVU Davis College of Agriculture, Natural Res. and Design

Outstanding Service Provider - 2008 - WVU Division of Forestry and Natural Resources

Outstanding Researcher - 2007 - WVU Division of Forestry and Natural Resources

Davis-Michaels Mid-Career Outstanding Faculty Award - 2007 - WVU Davis College Ag, NR, and Des

Outstanding Educator - 2006 - WVU Division of Forestry and Natural Resources

Outstanding Teacher - 2004 - WVU Division of Forestry

Outstanding Researcher - 2003 - WVU Division of Forestry

Hoyt Outstanding Faculty - 2003 - WVU Division of Forestry

Benedum Outstanding Service Learning Community Activity - 2003

DETAIL OF ACCOMPLISHMENTS AS ASSOCIATE DEAN OF ACADEMIC AFFAIRS

since September 2015 **Associate Dean of Academic Affairs,** Davis College of Agriculture, Natural Resources & Design, West Virginia University, Morgantown, WV

Context at WVU -

https://www.wvu.edu/

West Virginia University is a comprehensive Research I and highly engaged Land Grant institution (est. 1987) with current enrollment of approximately 32,000 students (50% women and 55% out-of-state). WVU does about \$175MM in research, with a full academic medical center and Extension Service in all 55 counties of the state.

The Davis College of Agriculture, Natural Resources and Design (https://www.davis.wvu.edu/) consists of -

- 2000 undergraduate students in 21 majors
- 300 graduate students (100 of which are PhD) in 25 majors (18 MS and 7 PhD)
- Alignment with the WVU Extension Service with joint projects, events, and shared faculty
- Fundraising of approximately \$2MM per year
- Research expenses of approximately \$12MM per year
- Seven farms (3600 acres) and five forests (9000 acres)
- Three constituent schools with five departments:
 - School of Agriculture and Food (Animal and Nutritional Sciences; Plant and Soil Sciences)
 - School of Natural Resources (Forestry and Natural Resources; Resource Economics and Management)
 - School of Design and Community Development

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Structure of the Academic Affairs Office -

The Academic Affairs office is comprised of the Associate Dean (my position) plus seven professional staff and two graduate students. These positions and general responsibilities include:

- Senior Director of Student Success Services advising and new student orientation; student success coaching and student retention initiatives; career services; graduation and commencement; communication planning
- Director of New Student Recruitment and Enrollment undergraduate student recruiting; marketing and communication; transfer articulations; transfer equivalency reviews; student ambassadors and new student mentoring
- Director of the Davis College Leadership Academy scholarships and enhancement grants; honors and student awards; honors convocation; student organizations; leadership training; entrepreneurship; mentorship program for upperclassmen
- Director of Online and Off-campus Programs online course development; marketing online programs;
 eCampus support
- **Undergraduate Student Records** undergraduate transcripts; graduation validation; transfers and academic updates
- **Graduate Student Records -** graduate transcripts; graduation validation; transfers and academic updates
- Administrative Assistant assistance across all offices; academic audits for NCAA and financial aid;
 office reports; student success coaching
- Graduate Assistant Student Success Coaching
- Graduate Assistant First Year Experience

In my role as associate dean of academic affairs, I am responsible for: leading the AA office; managing the activities of the other staff; working with faculty committees on diversity, scholarships, graduate curriculum, undergraduate curriculum, and international programs; undergraduate and graduate program assessment, reporting and accreditation, and college-level academic policy.

Major Accomplishments-

- Established an AA office credo, values statement, and strategic plan
- Formalized AA office staff responsibilities
- Oversaw significant college-wide growth in undergraduate enrollment the Davis College grew 15% in undergraduate enrollment from fall 2015 to fall 2018 (as compared to a 9% decline in the universitywide population) based largely on a consolidated marketing approach, a focus on increasing retention, and a focus on increasing the number of transfer students
- Oversaw significant college-wide improvements in first-time freshman retention retention of Davis College freshmen increased from 79% to just under 84% since 2015 (goal = 90%); Davis College retention now exceeds the overall university rate by 2-3%
- Developed and initiated a college-wide student retention plan that includes a formalized first year experience (Adventure Orientation Trip, Living Learning Center, First Year Seminar, Mid-Year Academy), a student success coaching program for at-risk students, and a peer-mentorship program accessible to incoming freshmen and transfer students
- Oversaw significant college-wide growth in online curricula and revenues through implementation of an online incentive program for faculty, we doubled the number of courses offered online and tripled online revenues (from \$600,000 to \$1.8MM annually) from 2015 – 2018

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- Helped to establish the first intercollegiate undergraduate program at WVU in Biochemistry, which has grown from 130 students to 230 students over the past three years.
- Helped to establish an intercollegiate online graduate certificate in GIS and Spatial Analysis (additional certificates in Water Resources and Project Management); this certificate now serves nearly 50 traditional on-campus graduate students per year and is rapidly growing on-line/off-campus enrollment
- Helped to establish two new BS degrees related to energy and environmental conservation (Energy Land Management; Environmental and Energy Resources Management) – both majors now enroll 100+ students each
- Helped to establish the first professional science masters at WVU (MS in Energy Environments) we have now articulated accelerated pathways from undergraduate majors in wildlife and fisheries and environmental sciences so that students can finish the MS and BS degrees in 5 years total
- Worked with College of Engineering and the College of Business to establish 2+2 and 3+2 articulation agreements with several Chinese Universities we have established articulations with the BS in Forest Resources Management, BS in Environmental and Energy Management, and MS in Energy Environments
- Travel to China to continue to develop these curricular agreements with academic institutions and to grow WVU's relationship in the energy sector with the China Energy Group (China's largest producer of electricity)
- Oversaw establishment of the Davis College Leadership Academy with two \$500,000 grants we established a college-wide leadership academy that gives undergraduate and graduate students access to leadership training and grants for research, travel, and entrepreneurship
- Initiated a series of college-wide programs to improve overall graduate student satisfaction, including: Davis College Graduate Student Association, new graduate student orientation, welcome-back graduate student / faculty mixer, and graduate student skills workshops (reviewing manuscripts; basic statistics in R; writing a research proposal; basic GIS applications)
- Helped to establish the university-wide Institute of Water Security and Science (link to website)
- Initiated and directed the WVU Environmentors chapter this program links WVU graduate students with local high school students; the WVU students serve as mentors to the HS students that conduct a yearlong independent research project; this program was designed to both provide research experience to HS students and to provide leadership training to the graduate students
- Initiated and directed the WVU Peace Corps Masters International program in Forestry and Natural Resources this program connects WVU graduate students in forestry to the Peace Corps as part of their graduate training; the Peace Corps recently dropped this program; while in existence at WVU we connected 10 graduate students to Peace Corps service in places like Morocco, Peru, and Jamaica.
- Served as a primary author on the university level self-study for the Higher Learning Commission accreditation

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PUBLISHED PEER-REVIEWED ARTICLES

Google Scholar Page

- *Graduate student or Post-Doctoral authors
- Merriam, E. R. *, J. T. Petty, and C. T. Trego. 2019. Incorporating predictive spatial models into a resilient fisheries management framework. in *Multispecies and Watershed Approaches to Freshwater Fish Conservation;* Dauwalter, D. C., T. W. Birdsong, and G. P. Garrett (editors).
- Merriam, E. R. *, and J. T. Petty. 2019. Stream channel restoration increases climate resiliency in a thermally vulnerable Appalachian river. *Restoration Ecology* 27:1420-1428.
- Trego, C. T. *, E. R. Merriam*, and **J. T. Petty**. 2019. Non-native trout limit native brook trout access to space and thermal refugia in a restored large-river system. *Restoration Ecology* 27:892-900.
- Merriam, E. R., J. T. Petty, J. Clingerman. 2019. Conservation planning at the intersection of landscape and climate change: a case study with brook trout in the Chesapeake Bay watershed. *Ecosphere* 10: e02585.
- Merriam, E. R.*, J. T. Petty, K. O. Maloney, J. A. Young, S. P. Faulkner, E. T. Slonecker, L. E. Milheim, A. Hailegiorgis, and J. Niles. 2018. Brook trout distributional response to unconventional oil and gas development: landscape context matters. *Science of the Total Environment* 628:338-349.
- Wood, D. M., A. B. Welsh, and J. T. Petty. 2018. Genetic assignment of brook trout reveals rapid success of culvert restoration in headwater streams. *North American Journal of Fisheries Management* 38:991-1003.
- Tri, A., J. Edwards, M. Strager, C. Ryan, C. Carpenter, M. Ternent, P. Carr, and J. T. Petty. 2017. Harvest rates and cause-specific mortality of American black bears in the wildland-urban interface of the mid-Atlantic region, USA. *Ursus* 28:1-13.
- Halley, Y., E. Merriam, A. Welsh, **J.T. Petty**. J. Anderson. 2017. Using environmental DNA to assess hellbender populations in the West Fork Greenbrier River, WV. *Proceedings of the West Virginia Academy of Sciences* 89: 1-20.
- Merriam, E. R.*, J. T. Petty, Nicolas Zegre. 2017. Can brook trout survive climate change in large rivers? If it rains. *Science of the Total Environment* 607:1225-1236.
- Watson, A. S.*, G. T. Merovich, **J. T. Petty**, and J. B. Gutta. 2017. Evaluating expected outcomes of acid remediation in an intensively mined Appalachian watershed. *Journal of Environmental Management*. 2017:189-339.
- Huntsman*, B. M., J. T. Petty, S. Sharma, and E. R. Merriam*. 2016. More than a corridor: use of a main stem stream as supplemental foraging habitat by a brook trout metapopulation. *Oecologia* 182:463-473.
- Merriam, E. R. *, and J. T. Petty. 2016. Under siege: isolated tributaries are threatened by regionally impaired metacommunities. *Science of the Total Environment* 560: 170-178.
- Merriam, E. R. *, **J. T. Petty**, and M. P. Strager. 2016. Watershed planning within a quantitative scenario analysis framework. *Journal of Visualized Experiments*, e54095-e54095.

- Tri, A. N., J. W. Edwards, M. P. Strager, J. T. Petty, C. W. Ryan, C. P. Carpenter. 2015. Habitat use by American black bears in the urban-wildland interface of the mid-Atlantic, USA. *Ursus* 27:45-56.
- Aunins, A., J. T. Petty, T. King, and P. Mazik. 2015. River mainstem thermal regimes influence population structuring in Appalachian brook trout populations. *Conservation Genetics* 16:15-29.
- Fulton, J. B., E. R. Merriam*, J. T. Petty, S. T. Grushecky, S. Harouff, K. J. Hartman, D. McGill, and B. Spong. 2015.

 Natural and anthropogenic controls over suspended sediments within a mountainous Appalachian watershed: implications for watershed restoration. *International Journal of Forest Engineering* 26:24-35.
- Mazotta, M., L. Wainger, S. Sifleet, J. T. Petty, and B. Rashleigh. 2015. Benefit transfer with limited data: an application to recreational fishing losses from surface mining. *Ecological Economics* 119:384-298.
- Merriam, E. R.*, J. T. Petty, M. P. Strager, A. E. Maxwell, and P. F. Ziemkiewicz. 2015. Complex contaminant mixtures in multi-stressor Appalachian watersheds. *Environmental Toxicology and Chemistry* 34:2603-2610.
- Merriam, E. R.*, **J. T. Petty**, M. P. Strager, A. E. Maxwell, and P. F. Ziemkiewicz. 2015. Landscape-based cumulative effects models for predicting stream response to mountaintop mining in multi-stressor Appalachian watersheds. *Freshwater Science* 34:1006-1019.
- Anderson, J. T., R. L. Ward, **J. T. Petty**, J. S. Kite, and M. P. Strager. 2014. Culvert effects on stream and stream-side salamander habitats. *International Journal of Environmental Science and Development* 5:274-281.
- Huntsman, B.*, and J. T. Petty. 2014. Density-dependent regulation of brook trout populations along a coreperiphery distribution continuum. *PLoS One* 9:1-15.
- **Petty, J. T.**, D. Thorne*, B. Huntsman*, and P. Mazik. 2014. The temperature-productivity squeeze: constraints on brook trout growth along an Appalachian river continuum. *Hydrobiologia* 727:151-166.
- Maxwell, A. E., M. P. Strager, C. B. Yuill, and J. T. Petty. 2013. Mapping mine land disturbance in the southern coalfields of West Virginia. *Proceedings ESRI* 2013:1-22.
- Merriam, E.*, J. T. Petty, M. P. Strager. A. E. Maxwell, and P. Ziemkiewicz. 2013. Scenario analysis predicts context-dependent stream response to land use change in a heavily mined central Appalachian watershed. *Freshwater Science* 32:1246-1259.
- Merovich, G. T*., **J. T. Petty**, and M. P. Strager. J.B. Fulton. 2013. Hierarchical classification of aquatic ecosystem condition: quantifying the riverscape in intensively developed watersheds. *Freshwater Science* 32:874-891.
- Petty, J. T., M. P. Strager, E. M. Merriam*, and P. F. Ziemkiewicz. 2013. Scenario analysis and the Watershed Futures Planner: predicting future aquatic conditions in an intensively mined Appalachian watershed. in *Environmental Considerations in Energy Production*. Edited by J. R. Craynon. Society for Mining, Metallurgy, and Exploration, Inc. Englewood, CO.
- **Petty, J. T.,** G. Gingerich*, J. T. Anderson, and P. F. Ziemkiewicz. 2013. Ecological function of constructed stream channels on reclaimed surface mines in West Virginia. *Hydrobiologia* 720:39-51.

- Maxwell, A. E., M. P. Strager, C. B. Yuill, and **J. T. Petty**. 2012. Modeling critical forest habitat in the south central Appalachians USA. *International Journal of Ecology* doi:10.1155/2012/182683.
- **Petty, J. T.,** and E. P. Merriam*. 2012. Brook trout restoration. *Nature Education Knowledge* 3:17. http://www.nature.com/scitable/knowledge/library/brook-trout-restoration-83031062
- **Petty, J. T.**, J. L. Hansbarger*, B. M. Huntsman*, and P. M. Mazik. 2012. Brook trout movement in response to temperature, flow, and thermal refugia within a complex Appalachian riverscape. *Transactions of the American Fisheries Society* 141:1060-1073.
- Pitchford, J. L., C. Wu, L. Lin, **J. T. Petty**, R. Thomas, W. E. Veselka IV, D. Welsch, N. Zegre, and J. T. Anderson. 2012. Climate change effects on hydrology and ecology of wetlands in the Mid-Atlantic Highlands. *Wetlands* DOI 10.1007/s13157-011-0259-3.
- Merriam, E.*, J. T. Petty, G. T. Merovich, Jr.*, J. B. Fulton, and M. P. Strager. 2011. Additive effects of mining and development in a central Appalachian watershed. *Journal of the North American Benthological Society* 30:399-418.
- **Petty, J. T.**, J. B. Fulton, M. Strager, G. T. Merovich*, J. Stiles, and P. Ziemkiewicz. 2010. Landscape indicators and thresholds of stream ecological impairment in an intensively mined Appalachian watershed. *Journal of the North American Benthological Society* 29:1292-1309.
- Grossman, G. D., R. J. Ratajczak, Jr., M. D. Farr, C. M Wagner, and **J. T. Petty**. 2010. Why there are more fish downstream. *In* Community Ecology of Freshwater Fishes. *American Fisheries Society Symposium*, 73:63-81.
- Grossman, G. D., R. J. Ratajczak, Jr., C. M. Wagner, and **J. T. Petty**. 2010. Dynamics and population regulation of southern brook trout in an Appalachian stream. *Freshwater Biology* 55:1494-1508.
- Hansbarger, J. L.*, J. T. Petty, and P. M. Mazik. 2010. Brook trout movement within a high-elevation watershed: consequences for watershed restoration. *Proceedings from the conference on the ecology and management of high-elevation forests in the central and southern Appalachian Mountains.* Gen. Tech. Rep. NRS-P-64. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. Pg. 74-84.
- Hense, Z.*, R. W. Martin*, and **J. T. Petty**. 2010. Electrofishing capture efficiencies for common stream fishes in a central Appalachian watershed. *North American Journal of Fisheries Management* 30:1041-1050.
- Johnson, J. B., M. A. Menzel, J. W. Edwards, W. M. Ford, **J. T. Petty**. 2010. Predicting foraging habitat of Gray Myotis in Georgia. *Proceedings of the Annual Conference of SE Association of Fish and Wildlife Agencies* 64:61-67.
- Merovich, G. T.*, Jr, and J. T. Petty. 2010. Continuous response of benthic macroinvertebrate assemblages to a discrete disturbance gradient: consequences for diagnosing stressors. *Journal of the North American Benthological Society* 29:1241-1257.
- **Petty, J. T.**, and G. D. Grossman. 2010. Giving-Up Densities and Ideal Pre-Emptive Distribution of a benthic predator in a southern Appalachian stream. *Freshwater Biology* 55:780-793.

- Strager, M. P., J. J. Fletcher, J. M. Strager, C. B. Yuill, R. N. Eli, **J. T. Petty**, and S. J. Lamont. 2010. Watershed analysis in GIS: the Watershed Characterization and Modeling System Software application. *Computers and Geosciences* 36:970-976.
- Martin, R. W.*, and **J. T. Petty.** 2009. Local temperature and thermal topology interact to influence the distribution of brook trout and smallmouth bass in a central Appalachian watershed. *Journal of Freshwater Ecology* 23:497-508.
- Poplar-Jeffers, I.*, J. T. Petty, J. A. Anderson, and S. J. Kite. 2009. Culvert replacement and stream habitat restoration: Implications from brook trout management in an Appalachian watershed, U.S.A. *Restoration Ecology* 17:404-413.
- Strager, M. P., **J. T. Petty**, J. M. Strager, and J. B. Fulton. 2009. A spatially explicit framework for quantifying downstream hydrologic conditions. *Journal of Environmental Management* 90:1854-1863.
- Hansbarger, J. L.*, **J. T. Petty**, and P. M. Mazik. 2008. Microhabitat use by brook trout in small tributaries and a large river main stem: implications for stream channel restoration in the upper Shavers Fork, WV. *Proceedings of the S.E. Association of Fish and Wildlife Agencies*.
- **Petty, J. T.**, Brady Gutta, Richard Herd, Jennifer Fulton, James Stiles, Michael Strager, Julie Svetlick, and Paul Ziemkiewicz. 2008. Identifying cost-effective restoration strategies in mining impacted West Virginia watersheds. *Proceedings of the American Society of Mining and Reclamation* 25:837-855.
- Strager, M.P., Vishesh Maskey, **J. Todd Petty**, Brady Gutta, Jenifer Fulton, Richard Herd, James Stiles, Julie Svetlik, and Paul Ziemkiewicz. 2008. A hydrologically networked watershed model for evaluating AMD treatment scenarios. *Proceedings of the American Society of Mining and Reclamation* 25:1217-1231.
- Ward, R. L., J. T. Anderson, and **J. T. Petty**. 2008. Effects of road crossings on stream and streamside salamanders. *Journal of Wildlife Management* 73:760-771.
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- Merovich, G. T.*, Jr., and **J. T. Petty**. 2007. Interactive effects of multiple stressors and restoration priorities in a mined Appalachian watershed. *Hydrobiologia* 575:13-31.
- Merovich, G. T.*, Jr., J. M. Stiles, **J. T. Petty**, P. F. Ziemkiewicz, and J. B. Fulton. 2007. Water chemistry based classification of streams and implications for stream restoration in mined Appalachian watersheds. *Environmental Toxicology and Chemistry* 26:1361-1369.
- **Petty, J. T.** and G. D. Grossman. 2007. Size dependent territoriality of mottled sculpin in a southern Appalachian stream. *Transactions of the American Fisheries Society* 136:1750-1761.
- Grossman, G. D., R. E. Ratajczak, J. T. Petty, M. D. Hunter, J. T. Peterson, and G. Grenouillet. 2006. Population dynamics of mottled sculpin in a variable environment: an information theoretic approach. *Ecological Monographs* 76:217-234.

- **Petty, J. T.**, and D. Thorne*. 2005. An ecologically based approach for identifying restoration priorities in acid impacted watersheds. *Restoration Ecology*. 13:348-357.
- **Petty J. T.**, Lamothe, P. J.*, and P. M. Mazik. 2005. Spatial and seasonal dynamics of brook trout populations inhabiting a central Appalachian watershed. *Transactions of the American Fisheries Society*. 134:572-587.
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- **Petty, J. T.**, Jason Freund*, Peter Lamothe*, and Patricia Mazik. 2002. Quantifying instream habitat in the upper Shavers Fork basin at multiple spatial scales. *Proceedings of the Southeastern Association of Fish and Wildlife Agencies* 55:81-94.
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- **Petty, J. T.**, and Gary D. Grossman. 1996. Patch selection by mottled sculpin (Pisces: Cottidae) in a southern Appalachian stream. *Freshwater Biology*, 35: 261-276.
- Grossman, Gary D., Jennifer Hill, and **J. T. Petty**. 1995. Observations on habitat structure, population regulation, and habitat use in evolutionarily significant units: a landscape approach. *American Fisheries Society Monograph Series*, 17:381-391.

PUBLISHED BOOK REVIEWS

Petty, J. T. 2006. Book review of *Monitoring Stream and Watershed Restoration* by Philip Roni (editor). for *Restoration Ecology*.

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PUBLISHED PEER-REVIEWED REPORTS

- **Petty, J. T.,** G. Gengerich, J. T. Anderson, and P. Ziemkiewicz. 2011. Quantifying the functional value of stream and wetland mitigation structures on reclaimed surface mines in West Virginia. *Office of Surface Mining Technology Transfer and Applied Science*.
- USEPA Science Advisory Board Mountaintop Mining Panel. 2011. Review of field-based aquatic life benchmark for conductivity in Central Appalachian streams. *Final Report to the USEPA Science Advisory Board*.
- USEPA Science Advisory Board Mountaintop Mining Panel. 2011. Review of EPA's draft report on aquatic ecosystem effects of mountaintop mining and valley fills. *Final Report to the USEPA Science Advisory Board*.

PUBLISHED NON-REVIEWED ARTICLES AND REPORTS

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- Herd, R., J. Fulton, **J. T. Petty**, B. Gutta, J. Stiles, and P. Ziemkiewicz. 2008. Estimated costs of restoring WV AML impaired streams. *Final Report to WVDEP AML Program*.
- Herd, R., J. Fulton, **J. T. Petty**, B. Gutta, J. Stiles, and P. Ziemkiewicz. 2008. A strategic watershed restoration plan for middle Cheat River. *Final Report to WVDEP AML Program*.
- **Petty, J. T.,** and P. Ziemkiewicz. 2008. A watershed scale mitigation process for WV's coal mining industry. *Final Report to the WVDEP and the WVCA*.
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- Herd, R., J. Fulton, **J. T. Petty**, B. Gutta, J. Stiles, and P. Ziemkiewicz. 2007. A strategic watershed restoration plan for Abram Creek. *Final Report to WVDEP AML Program*.
- Herd, R., J. Fulton, **J. T. Petty**, B. Gutta, J. Stiles, and P. Ziemkiewicz. 2007. A strategic watershed restoration plan for Paint Creek. *Final Report to WVDEP AML Program*.
- Herd, R., J. Fulton, **J. T. Petty**, B. Gutta, J. Stiles, and P. Ziemkiewicz. 2007. A strategic watershed restoration plan for Three Fork. *Final Report to WVDEP AML Program*.
- **Petty, J. T.**, P. Ziemkiewicz, and J. Stiles. 2007. A hierarchical classification system for setting restoration and protection priorities in mined Appalachian watersheds at multiple spatial scales. *Final Report to USEPA Science to Achieve Results Program*.

Petty Vitae: page 12 of 32

Petty, J. T. 2006. Streams and rivers. *West Virginia Encyclopedia*. West Virginia Humanities Council. Charleston, WV.

RESEARCH GRANTS RECEIVED (2006 – 2018)

Total funding for research since 2000 = \$20 million; Funding as PI = \$5 million

Modeling water quality changes in the Monongahela River basin

Investigator(s): Petty, O'Neill, and Merriam

Funding Period: September 2019 – December 2020

Funding Source(s): USGS Funding Amount: \$42,912

The Appalachian Freshwater Initiative

Investigator(s): Anderson, Petty, Strager, Lin, Vesper, Weidhaas, Zegre, and Skousen

Funding Period: September 2015 – December 2020

Funding Source(s): NSF

Funding Amount: \$5,000,000

Improving water management, treatment and recovery in oil and gas production

Investigator(s): Ziemkiewicz, Finklea, Petty, Donovan, Lin, and Grushecky

Funding Period: September 2016 – July 2019

Funding Source(s): NSF

Funding Amount: \$1,850,900

Quantifying the success and long-term ecological and socioeconomic benefits of AMD remediation

Investigator(s): Strager, Merriam, Petty, Hause, and Ziemkiewicz

Funding Period: October 2016 - September 2019

Funding Source(s): USDoI-Office of Surface Mining

Funding Amount: \$252,990

Water and energy: spatial technologies to protect water resources in oil and gas development

Investigator(s): Merriam, Petty, Strager, and Kinder Funding Period: January 2018 – December 2018 Funding Source(s): WVU Energy Institute

Funding Amount: \$22,699

Conservation map for the Little Tennessee River NFCA Partnership

Investigator(s): Clingerman, Petty, and Strager Funding Period: December 2016 – December 2018

Funding Source(s): North Carolina Wildlife Resources Commission

Funding Amount: \$50,525

Environmental STEM research program: WVU/BSA Bechtel Summit

Investigator(s): Ziemkiewicz, Petty, Anderson, Thomas, and Smaldone

Funding Period: March 2016 – February 2017 Funding Source(s): US Geological Survey

Funding Amount: \$273,900

Petty Vitae: page 13 of 32

Applied modeling of brook trout populations and response to unconventional oil and gas development

Investigator(s): Petty, Merriam & Mazik

Funding Period: September 2015 – December 2016

Funding Source(s): USGS Funding Amount: \$45,000

Quantifying brook trout fishery benefits of restoration on the upper Shavers Fork, Phase 2

Investigator(s): Petty and Kinder

Funding Period: August 2014 – December 2017

Funding Source(s): WVDNR Funding Amount: \$290,000

Hierarchical Assessment of Fish Habitats in Support of the North Atlantic Land Conservation Consortium.

Investigator(s): Boettner, Petty, and Strager Funding Period: January 2013 – December 2014

Funding Source(s): NALCC Funding Amount: \$300,000

Appalachian Region Integrated Environmental Sciences: Area 1 – Assessment of Mining Impacts

Investigator(s): Ziemkiewicz, Petty, Strager, and Craynon Funding Period: November 2011 – December 2015

Funding Source(s): ARIES industry partners

Funding Amount: \$1,875,000

Incorporating fish assemblage data into a definition of WV stream biological condition

Investigator(s): Petty and Ziemkiewicz

Funding Period: November 2011 - December 2014

Funding Source(s): WVDEP Funding Amount: \$65,000

A Hierarchical Alternative Futures Modeling System to Support Mine Permitting Decisions

Investigator(s): Petty, Strager, Fulton, and Ziemkiewicz

Funding Period: July 2010 - June 2014

Funding Source(s): USGS Funding Amount: \$359,000

Quantifying ecological benefits of stream channel reconstruction on the Little Coal River; Phase II

Investigator(s): Petty and Fulton

Funding Period: December 2010 – November 2014

Funding Source(s): WVDEP Funding Amount: \$150,000

Assessing lost ecosystem services due to mining in the Appalachian Region

Investigator(s): Petty et al.

Funding Period: November 2011 - December 2013

Funding Source(s): USEPA Funding Amount: \$50,000

West Virginia's pilot test of ecological approaches to environmental protection

Investigator(s): Anderson, Vaselka, Ghadimi, Strager, Petty, Katzner, and Lin

Petty Vitae: page 14 of 32

Funding Period: March 2011 – May 2012

Funding Source(s): National Academy of Sciences

Funding Amount: \$360,000

Petty Vitae: page 15 of 32

Quantifying brook trout fishery benefits of restoration on the upper Shavers Fork, Phase 1

Investigator(s): Petty and Mazik

Funding Period: January 2011 – December 2013 Funding Source(s): WVDNR and NRCS

Funding Amount: \$140,000

Integrating mitigation benefits into an alternative futures modeling system

Investigator(s): Petty, Strager, Miller, and Ziemkiewicz Funding Period: December 2010 – November 2013

Funding Source(s): WVDEP Funding Amount: \$180,000

Hierarchical Assessment of Fish Habitats in Support of USFWS Midwest Region

Investigator(s): Boettner, Petty, Strager, Lestinger, and Hansen

Funding Period: April 2010 – December 2013

Funding Source(s): USFWS Funding Amount: \$300,000

DNA-Based Population Demographics of Black Bears in Maryland

Investigator(s): Edwards, Strager, and Petty Funding Period: May 2010 – June 2012 Funding Source(s): Maryland DNR

Funding Amount: \$84,370

Appalachian assessment of natural assets: water.

Investigator(s): Deng, Strager, Anderson, Petty, Harris, Zegre, Jackson, and Lamont

Funding Period: October 2009 – September 2010

Funding Source(s): Appalachian Regional Commission

Funding Amount: \$248,150

Development of an environmental center of excellence for the mid-Atlantic Highlands

Investigator(s): Anderson, Petty, Bissonnette, and Fletcher

Funding Period: August 2009 – July 2010

Funding Source(s): NOAA
Funding Amount: \$1,705,250

Elk headwaters watershed planning and analysis

Investigator(s): Hansen, Boettner, and Petty Funding Period: July 2009 – December 2010

Funding Source(s): WVDEP Funding Amount: \$53,000

Quantifying ecological benefits of stream channel reconstruction on the Little Coal River

Investigator(s): Petty and Fulton

Funding Period: January 2009 – December 2010

Funding Source(s): WVDEP Funding Amount: \$120,000

Identifying sources of water quality impairment at the Halifax Airport

Investigator(s): Petty and Fulton

Funding Period: August 2008 - December 2008

Funding Source(s): Halifax Airport

Petty Vitae: page 16 of 32

Funding Amount: \$3,000

Brook trout reintroduction and nutrient load reductions in Rocky Marsh Creek

Investigator(s): Hankins, Schrecongoest, and Petty Funding Period: December 2007 – December 2009

Funding Source(s): USEPA Funding Amount: \$800,000

Quantifying the functional value of stream and wetland habitats on reclaimed surface mines

Investigator(s): Petty, Anderson, and Ziemkiwicz Funding Period: November 2007 – December 2008

Funding Source(s): OSM
Funding Amount: \$100,000

Watershed scale mitigation programs for managing large scale surface mining

Investigator(s): Petty and Ziemkiewicz

Funding Period: September 2007 – August 2008

Funding Source(s): Consol Funding Amount: \$120,000

Quantification of key stream mitigation factors

Investigator(s): Petty and Ziemkiewicz

Funding Period: September 2007 – December 2008 Funding Source(s): Magnum Coal Company

Funding Amount: \$35,000

Technical Support for AML Implementation to Restore WV Watesheds

Investigator(s): Herd, Ziemkiewicz, and Petty Funding Period: June 2007 – December 2008

Funding Source(s): WV DEP Funding Amount: \$472,148

Experimental analysis of the effects of valley fills on headwater streams

Investigator(s): Petty

Funding Period: May 2007 - February 2009

Funding Source(s): USGS Funding Amount: \$48,000

An adaptive management framework to implement the Eastern Brook Trout Joint Venture

Investigator(s): Petty and Mazik

Funding Period: May 2007 – August 2010

Funding Source(s): USFWS Funding Amount: \$150,000

Experimental examination of the effects of valley fill mines on stream hydrology and water chemistry

Investigator(s): Petty, Ziemkiewicz, and Stiles Funding Period: April 2007 – August 2009

Funding Source(s): USGS Funding Amount: \$75,000 Petty Vitae: page 17 of 32

Scholarly review and revision of nutrient criteria for West Virginia lakes

Investigator(s): Petty and Lin

Funding Period: July 2006 – August 2007

Funding Source(s): USEPA Funding Amount: \$26,191

Integrated restoration of the Cheat River watershed

Investigator(s): Pitzer, Herd, Ziemkiewicz, and Petty

Funding Period: July 2006 - December 2009

Funding Source(s): USEPA Targeted Watershed Initiative Program

Funding Amount: \$835,000

Comprehensive Brook Trout population assessment in WV: Part 1

Investigator(s): Petty and Mazik

Funding Period: January 2006- December 2008

Funding Source(s): USGS Funding Amount: \$25,000

Comprehensive Brook Trout population assessment in WV: Part 2

Investigator(s): Petty and Mazik

Funding Period: January 2006 – December 2008

Funding Source(s): USFWS Funding Amount: \$30,000

Watershed-scale management of sediments in the upper Elk River

Investigator(s): Petty, Hartman, and Grushecky Funding Period: January 2005 – December 2005

Funding Source(s): WV DEP Funding Amount: \$85,040

A synthesis of research to establish a water quality trading program for the Cheat River, WV

Investigator(s): Petty

Funding Period: January 2004 – December 2005

Funding Source(s): Electrical Power Research Institute

Funding Amount: \$13,822

A hierarchical watershed classification system for identifying restoration priorities and impact vulnerability in mined watersheds of the Mid-Atlantic Highlands

Investigator(s): Petty, Ziemkiewicz, and Stiles Funding Period: March 2004 – August 2007

Funding Source(s): US EPA Science to Achieve Results (STAR) Program

Funding Amount: \$607,566

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TEACHING

WMAN/BIOL 446 – Freshwater Ecology – this is a lecture and lab-based class that I have taught continuously since 2000; it is cross listed between the wildlife and fisheries department and biology and nearly 100 students take it each year

ANRD 191 – First Year Seminar – working with a team of faculty, we developed this college-wide freshman seminar class as part of our comprehensive first year experience initiative

ANRD 189 – Academic Mindset – we developed this course to complement ANRD 191; it is taught in the second semester and is required of all freshman that earned a GPA < 2.0 in their first fall semester; this course focuses on identifying individual student strengths and learning how they can use those strengths to be successful in college

WMAN 445 – Fisheries Management – This class is a required class for all wildlife and fisheries students. I taught this class continuously from 2000-2014;

WMAN 512 – Advanced Population Ecology – A graduate level class covers advanced concepts and quantitative procedures in population ecology and conservation science. I taught this class every other year from 2000-2014

WMAN 633 – Quantitative Ecology – A graduate level class that introduces students to advanced statistical approaches in R with applications to ecological and conservation sciences. I taught this class every other year from 2000-2014

WMAN 642 – Advanced Fisheries Management – This graduate level class was taught as an online course for students at the USFWS National Conservation Training Center (NCTC).

WMAN 449 – Stream Ecosystem Assessment – This is a summer off-campus field course that is taught throughout the Appalachian region

WMAN 175 – Introduction to Fisheries and Wildlife – When I first started at WVU, we did not have a freshman class in wildlife and fisheries. I developed this class so that we could engage our students earlier, attract new students to the major and increase retention. Since this course was initiated, enrollment in the wildlife and fisheries major has tripled from approximately 90 students to nearly 300.

PROFESSIONAL WORKSHOPS TAUGHT

Principles of Natural Stream Processes, Functions, and Restoration Professional Workshop (offered 10 times 2002 – 2008)

Field Assessment and Analysis for Natural Stream Channel Design Professional Workshop (offered 7 times 2002 – 2008) Petty Vitae: page 19 of 32

TEACHING GRANTS RECEIVED

The Appalachian Water-Energy Nexus for 9-12 graders

Investigator(s): Petty and Artis

Funding Period: August 2014 – May 2015

Funding Source(s): Higgs Environmental Education Endowment

Funding Amount: \$3,000

Experiential learning in environmental science for 9-12 graders

Investigator(s): Petty and Artis

Funding Period: January 2012 – December 2013

Funding Source(s): National Council for Science and the Environment

Funding Amount: \$1,000

Experiential learning in environmental science for 9-12 graders

Investigator(s): Petty and Dey

Funding Period: June 2011 – December 2012

Funding Source(s): National Council for Science and the Environment

Funding Amount: \$7,800

Principles and Assessment of Natural Stream Processes and Functions

Investigator(s): Kite, Petty, and Gray
Funding Period: June – December 2008
Funding Source(s): Canaan Valley Institute

Funding Amount: \$38,290

Principles of Natural Stream Processes and Functions

Investigator(s): Kite, Petty, and Gray
Funding Period: June – December 2007
Funding Source(s): Canaan Valley Institute

Funding Amount: \$14,000

Assessment of Natural Stream Processes and Functions

Investigator(s): Kite, Petty, and Gray
Funding Period: June – December 2007
Funding Source(s): Canaan Valley Institute

Funding Amount: \$14,000

Principles of Natural Stream Restoration

Investigator(s): Fortney, Petty, Kite, and Anderson Funding Period: June 2002 – December 2004

Funding Source(s): WV-DOH and WV Association of Consulting Engineers

Funding Amount: \$259,160

After School Curricula in Water Sciences

Investigator(s): Petty, Hansen, and Martin

Funding Period: September 2003 – December 2003

Funding Source(s): Benedum Foundation and the WVU Office of Service Learning

Funding Amount: \$1,836

Integrating Service Learning into Courses in Aquatic Sciences

Investigator(s): Petty, Hansen, and Martin
Funding Period: September 2002 – August 2003

Funding Source(s): Kellogg Foundation and the WVU Office of Service Learning

Funding Amount: \$20,613

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GRADUATE STUDENTS

CURRENT

Brian Gordon, MS student

Thesis title: Modeling effects of climate change on water temperature in West Virginia trout streams.

Expected Graduation Date: May 2020

Kevin Eliason, PhD student

Thesis title: Effects of unconventional oil and gas development on stream ecosystems.

Expected Graduation Date: August 2020

COMPLETED

Rebecca Long, MS student

Thesis title: Stream ecosystem response to watershed scale remediation of acid mine drainage.

Graduation Date: May 2019

Current Position: Biologist, Florida Fish and Wildlife Commission

Josh Ankeny, MS student

Thesis title: Fish assemblage response to unconventional oil and gas development.

Graduation Date: August 2019 Current Position: WVU technician

Benjamin Harris, MS student

Thesis title: *Brook trout response to restoration.*

Graduation Date: August 2017

Current Position: Director, Pacific Salmon Trust

Cory Trego, MS student

Thesis title: Effect of stream restoration on non-native fish species.

Graduation Date: August 2017

Current Position: Chester County Water Resources Authority

Eric Merriam, PhD student

Thesis title: Cumulative effects modeling in the central Appalachians.

Graduation Date: August 2015

Current Position: Watershed Planning Coordinator, US Army Corps of Engineers

Alison Anderson, PhD student

Thesis title: A hierarchical approach to classifying and managing impaired waterbodies in the central Appalachians.

Graduation Date: August 2015

Current Position: Research Scientist, US Army Corps of Engineers

Eric Miller, PhD student

Thesis title: Ecological benefits associated with stream mitigation projects in southern WV.

Graduation Date: August 2015

Current Position: Assistant Professor, William & Mary

Andrew Watson, MS

Thesis title: Benefits of AMD remediation

Graduation Date: August 2014

Current Position: Peace Corps Volunteer, Peru

Petty Vitae: page 21 of 32

Brock Huntsman, PhD

Thesis title: Brook trout restoration ecology

Graduation Date: May 2014

Current Position: Research Scientist, US Geologic Survey

Brian Carlson, MS

Thesis title: Stream response to in stream dosing in the Muddy Creek watershed.

Graduation Date: August 2013

Current Position: Allstar Environmental Consulting

Jennie Franks, MS

Thesis title: Relationships between user perceptions and biological condition of rivers in West Virginia watersheds.

Graduation Date: December 2013

Current Position: Fisheries Biologist – National Oceanographic and Atmospheric Agency

Michael Tincher, MS

Thesis title: Watershed scale ecology of brook trout and applications for population recovery.

Graduation Date: August 2013

Current Position: Environmental Consulting

Mary Fiona Stewart, MS

Thesis title: Restoring lost nutrient uptake capacity in acid impaired headwater streams of the central Appalachian

plateau.

Graduation Date: December 2010

Current Position: Environmental Consulting

Roy Martin, PhD

Thesis title: Fish metapopulation and metacommunity ecology in mined Appalachian watersheds.

Graduation Date: May 2010

Current Position: Research Scientist; US Environmental Protection Agency

Gretchen Gingerich, MS

Thesis title: Functional value of stream and wetland habitats on reclaimed surface mines in southern West Virginia.

Graduation Date: December 2009

Current Position: mom

Eric Miller, MS

Thesis title: Ecological benefits of stream restoration on the Little Coal River.

Graduation Date: August 2015

Current Position: Assistant Professor, William & Mary

Eric Merriam, MS

Thesis title: Watershed scale analysis of current conditions and functional restoration opportunities in an intensively

mined West Virginia watershed. Graduation Date: December 2009

Current Position: Watershed Planning Coordinator, US Army Corps of Engineers

Megan Minter, MS

Thesis title: Organic matter processing potential along a stream size continuum in an intensively mined West Virginia

watershed.

Graduation Date: December 2009

Current Position: Environmental Consulting

Jason Clingerman, MS

Thesis title: Landscape indicators of brook trout population status in West Virginia watersheds.

Graduation Date: August 2008

Petty Vitae: page 22 of 32

Current Position: Aquatic Research Scientist, Downstream Strategies

George Merovich, PhD

Thesis title: Landscape scale processes influencing benthic macroinvertebrate communities in intensively mined

Appalachian watersheds.
Graduation Date: December 2007

Current Position: Assistant Professor, Juniata College

Zina Hense, M.S.

Thesis title: Watershed-scale variation in juvenile recruitment of benthic stream fishes.

Graduation Date: May 2007

Current Position: Research Biologist, Delaware Marine Fisheries Commission

Zach Liller, M.S.

Thesis title: Source-sink interactions and brook trout population dynamics in small and large basin area streams.

Graduation Date: May 2006

Current Position: Research Biologist, Alaska Game and Fish Commission

Ira Poplar-Jeffers, M.S.

Thesis title: Effects of culverts on fish communities in central Appalachian watersheds

Graduation Date: December 2005

Current Position: Research Ecologist, White Consulting, Inc.

Jeff Hansbarger, M.S.

Thesis title: Movement and habitat use by brook trout in response to seasonal changes in habitat quality and water

temperature.

Graduation Date: August 2005

Current Position: Regional Fish Biologist, WVDNR, Huntington, WV

Sarah McClurg, M.S.

Thesis title: Stream ecosystem response to limestone mitigation in acid impacted streams.

Graduation Date: December 2004

Current Position: Co-Owner, Allstar Ecology Environmental Consulting

David Thorne, M.S.

Thesis title: Diet and Growth of Brook Trout Inhabiting Areas of Varying Resources and Temperature Regimes.

Graduation Date: December 2004

Current Position: Fisheries Biologist with WV DNR, Elkins, WV

Cindy Sanders, M.S.

Thesis title: Sources and ecological consequences of sediments in the upper Elk River basin.

Graduation Date: August 2004

Current Position: Environmental Lawyer

Jason Freund, PhD

Thesis title: Effects of watershed fragmentation on fish communities in the Cheat River basin.

Graduation Date: August 2004

Current Position: Associate Profesor, Carroll College

Jesse Bopp, M.S.

Thesis title: Variation in benthic invertebrate communities along a central Appalachian stream continuum.

Graduation Date: August 2002

Current Position: Environmental Lawyer, Denver, CO

Peter A. Lamothe, M.S.

Thesis title: Spatial population structure of brook trout in an acid impacted Appalachian drainage.

Petty Vitae: page 23 of 32

Graduation Date: May 2002

Current Position: US Fish and Wildlife Service, Maine

TECHNICAL PRESENTATIONS (presenting author) - since 2012

- *Refers to invited seminar or symposium
- Petty, J. T., E. Merriam, B. Huntsman, C. Trego. 2019. Brook trout, climate change, and Appalachian riverscapes. 149th Annual Meeting of the American Fisheries Society. Reno, NV. September 2019.
- *Petty, J. T. 2018. A Network Approach to River Restoration and Complications of Climate Change in Appalachian Watersheds. IWSS Spring Conference. Morgantown, WV. February 20-21, 2018.
- Petty, J. T. 2018. Restoring Appalachian River Networks in a Changing Climate. UCOWR/NIWR Conference. Pittsburgh, PA. June 26-28, 2018.
- Petty, J. T. 2018. Restoring Appalachian River Networks in a Changing Climate. Annual Meeting of the American Fisheries Society. Atlantic City, NJ. June 26-28, 2018.
- *Petty, J. T. 2017. Water resources research in the mid-Atlantic highlands. West Virginia State University. Charleston, WV. July 13, 2017
- Petty, J. T. and J. Clingerman. 2017. Conservation planning in actively developing watersheds. Little Tennessee Conservation Workgroup. Great Smokey Mountains National Park. Gatlinburg, TN. March 7-9, 2017.
- *Petty, J. T. 2016. Brook trout restoration and climate change. Virginia Commonwealth University. Richmond, VA. February 29, 2016
- *Petty, J. T. 2016. An introduction to fishhabitattool.org. Webinar to the USFWS. March 2, 2016.
- *Petty, J. T. 2016. An introduction to fishhabitattool.org. Workshop for the USFWS. Annapolis, MD. April 3, 2016.
- *Petty, J. T. 2016. Appalachian Freshwater. Institute of Water Science and Security Symposium. Morgantown, WV. April 22, 2016.
- *Petty, J. T. 2016. The Appalachian stream syndrome and the unique nature of Appalachian water and watersheds. Reed School of Media Workshop. Morgantown, WV. April 30, 2016.
- *Petty, J. T. 2016. Restoration planning at the intersection of landscape and climate change: a case study with brook trout in the Chesapeake Bay watershed. EcoStream Conference. Asheville, NC. August 22-25, 2016.
- *Petty, J. T. 2016. Restoration planning at the intersection of landscape and climate change: a case study with brook trout in the Chesapeake Bay watershed. Big12 Universities Water Workshop. Baylor University. Waco, TX. September 25-28, 2016.
- *Petty, J. T. 2016. Water futures in energy environments. Governor Tomblin's Energy Summit; West Virginia: Tackling America's Energy Challenges. Stonewall Resort, Roanoke, WV. October 6-7, 2016.
- *Petty, J. T. 2015. Stream mitigation in the WV coalfields: benefits and constraints. WV-IRT. March 25, 2015. Charleston, WV.
- *Petty, J. T. 2015. Chesapeake Bay Brook Trout: current conditions and climate vulnerability. USGS Brook Trout Workshop. April 7-8, 2015. Hadley, MA.

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- *Petty, J. T. 2015. Brook trout conservation within the context of climate change. Climate change and West Virginia Forests. April 14-15, 2015. Morgantown, WV.
- Petty, J. T., and J. Clingerman. 2015. Chesapeake Bay watershed brook trout habitat and climate change vulnerability assessment. Annual Meeting of the American Fisheries Society. August 15-21, 2015. Portland, OR.
- *Petty, J. T. 2014. Watershed ecology, modeling and decision making within a house-neighborhood context. Invited seminar to the USEPA Office of Research and Development. February 19, 2014. Cincinnati, OH.
- *Petty, J. T. 2014. Where have all of the big fish gone? Invited seminar at the UMCES Appalachian Lab. March 13, 2014. Frostburg, MD.
- *Petty, J. T. 2014. Fish habitat assessments. Invited participant in USFWS workshop on fish habitat assessment analytical tools. May 6, 2014. Minneapolis, MN.
- *Petty, J. T., and B. Huntsman. 2014. River main stem conditions influence brook trout metapopulation structure in Appalachian watersheds. Annual Meeting of the American Fisheries Society. August 15-21, 2014. Quebec City.
- *Petty, J. T., B. Huntsman, and E. R. Merriam. 2014. River main stem conditions influence central Appalachian brook trout metapopulations. Wild Trout Symposium. September 24, 2014. Yellowstone, MT.
- *Petty, J. T. 2014. Brook trout habitat prioritization model for the Chesapeake Bay. Invited seminar at Chesapeake Bay Program Habitat Goal Implementation Team Fall 2014 Meeting. October 21, 2014. Annapolis, MD.
- *Petty, J. T. 2014. Chesapeake Bay brook trout prioritization tool. Annual Meeting of Restore America's Estuaries. November 4, 2014. Washington, DC.
- *Petty, J. T. 2014. A view of stream habitat conditions in the Chesapeake Bay watershed through the eyes of brook trout. Invited seminar at the Chesapeake Bay Program Science and Technical Assessment Team. December 4, 2014. Annapolis, MD.
- *Petty, J. T., and J. Clingerman. 2014. Chesapeake Bay brook trout prioritization tool. Invited presentation at the Annual Fall Meeting of the Eastern Brook Trout Joint Venture. September 10, 2014. Shepherdstown, WV.
- *Petty, J. T. 2014. Brook torut habitat prioritization. Invited seminar at Chesapeake Bay Program Habitat Goal Implementation Team Winter 2014 Meeting. February 26, 2014. Sparrows Point, MD.
- *J. T. Petty. Landscapes, Riverscapes, and Aquatic Meta-Communities. Invited Participant in Symposium on Landscape Processes and Watershed Ecology. American Geophysical Union. San Francisco, CA. December 2013.
- *J. T. Petty. Decision support for brook trout restoration in the Chesapeake Bay region. Invited Webinar for Eastern Brook Trout Joint Venture. December 2013.
- *J. T. Petty. Multiple stressors and brook trout restoration. Invited Participant at Mid-Atlantic Stream Restoration Conference. Baltimore, MD. October 2013.
- *J. T. Petty, M. Strager, and P. Ziemkiewicz. 2013. The Watershed Futures Planner. Invited Participant at the WVU Research Corporation LINC Program Event, Morgantown, WV. October 2013.
- *J. T. Petty, F. Boettner, and J. Clingerman. 2013. Quantifying fish habitat quality in the North Atlantic: applications for the Eastern Brook Trout Joint Venture. Invited Speaker at the Annual Meeting of the Eastern Brook Trout Joint Venture. Frostburg, MD. June 2013.
- *J. T. Petty and E. Merriam. 2013. Alternative future watershed conditions in the MTR-VF region. Invited Symposium Participant at the Annual Meeting of the Society of Freshwater Science. Jacksonville, FL. May 2013.

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- *J. T. Petty, M. Strager, and P. Ziemkiewicz. 2013. The Watershed Futures Planner: quantitative scenario analysis in actively developing watersheds. Invited Participant at the Society of Mining Engineering, Environmental Considerations in Energy Development Symposium, April 2013.
- *J. T. Petty. 2013. Development of a multi-metric biotic index for WV watersheds. Invited Participant at the WV Mine Drainage Task Force Symposium, March 2013.
- *J. T. Petty. 2013. Watershed Management and Issues in Scale. US Environmental Protection Agency, Office of Research and Development, Invited Webinar, March 2013.
- *J. T. Petty. 2013. Functional stream restoration from a watershed perspective. Invited Participant at US Forest Service Functional Restoration Ecology Workshop Pittsburgh, PA, January 2013.
- *J. T. Petty. 2012. Quantifying stressor and natural habitat quality: linking data to fish habitat conservation. Invited Symposium Participant at the American Fisheries Society 142nd Annual Meeting. St. Paul, MN. August 2012.
- *J. T. Petty. 2012. Hope for Appalachian watersheds: Is there any? Invited Plenary Speaker at the 2012 Water Research Symposium. Morgantown, WV. October 2012.
- *J. T. Petty. 2012. Watershed ecology and decision making within complex Appalachian riverscapes. Invited Webinar. US Environmental Protection Agency, Office of Research and Development. October 2012.
- *J. T. Petty. 2012. Water resources conservation within the central Appalachian coal mining region. Invited speaker. Annual WV Coal Association Technical Meeting. Charleston, WV. May 2012.
- *J. T. Petty. 2012. Ecosystem modeling. ARIES Technical Meeting. Morgantown, WV. January 2012.

TECHNICAL PRESENTATIONS (co-author) – since 2012

- *Refers to students in my lab
- *Ankeny, J, J. Petty, Q. Phelps, E. Merriam. 2019. Effects of unconventional oil and gas development on fish community structure and physiological stress. 149th Annual Meeting of the American Fisheries Society. Reno, NV. September 2019.
- *Eliason, K., et al. 2018. Stream water quality in response to UOG development. UCOWR/NIWR Conference. Pittsburgh, PA. June 26-28, 2018
- *Merriam, E.R. and J.T. Petty. 2018. Brook trout distributional response to unconventional oil and gas: landscape context matters. UCOWR/NIWR Conference. Pittsburgh, PA. June 26-28, 2018
- *Long, R., E.R. Merriam and J.T. Petty. 2018. Long-term fish community response to watershed scale acid remediation. UCOWR/NIWR Conference. Pittsburgh, PA. June 26-28, 2018
- *Eliason, K., et al. 2018. Stream water quality in response to UOG development. ICRW. Shephardstown, WV. July 23-26, 2018
- *Huntsman, B.M., R.W. Martin, and J.T. Petty. 2018. Use of an integrated Growth Model to Describe Brook Trout Production along an Appalachian Riverscape. WVWR Conference. Morgantown, WV. September 28-29 2018
- *Eliason, K., E.R. Merriam, and J.T. Petty. 2018. Cumulative Effects of Unconventional Oil and Gas Development within West Virginia. WVWR Conference. Morgantown, WV. September 28-29 2018

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- *Ankeny, J., J.T. Petty, and E.R. Merriam. 2018 Analysis of Unconventional Oil and Gas on Downstream Fish Assemblages Using a BACI Approach. WVWR Conference. Morgantown, WV. September 28-29 2018
- *Huntsman, B.M., R.W. Martin, and J.T. Petty. 2018. Use of an integrated Growth Model to Describe Brook Trout Production along an Appalachian Riverscape. AFS Annual Meeting, Atlantic City, NJ. August 19-23 2018
- *Eliason, K., E.R. Merriam, and J.T. Petty. 2018. Cumulative Effects of Unconventional Oil and Gas Development within West Virginia. AFS Annual Meeting, Atlantic City, NJ. August 19-23 2018
- *Long, R., E.R. Merriam and J.T. Petty. 2018. Long-term fish community response to watershed scale acid remediation. AFS Annual Meeting, Atlantic City, NJ. August 19-23 2018
- *Ankeny, J., J.T. Petty, and E.R. Merriam. 2018 Analysis of Unconventional Oil and Gas on Downstream Fish Assemblages Using a BACI Approach. AFS Annual Meeting, Atlantic City, NJ. August 19-23 2018
- *Merriam, E. R., J. T. Petty. 2017. Brook trout response to unconventional oil and gas development: landscape context matters. Mid-Atlantic Water Resources Conference. Shepherdstown, WV.
- *Merriam, E. R., J. T. Petty, R. Fernandez, and N. Zegre. 2017. Can brook trout survive climate change in large rivers? If it rains. National Meeting of the American Fisheries Society. Tampa, FL.
- *Merriam, E. R., R. Fernandez, J. T. Petty, and N. Zegre. 2017. Can brook trout survive climate change in large rivers? If it rains. WV/PA Chapter of the American Fisheries Society. California, PA.
- *Merovich, Jr., G. T., A. Watson, J. T. Petty, J. B. Gutta. 2016. Spatial and predicted outcomes of watershed restoration in an AMD-impacted watershed. 2016 Technical Meeting, The PA Chapter of AFS. February 11-12, 2016. Susquehanna University, Selinsgrove, PA.
- *Harris, B., and J.T. Petty. 2016. Brook and Brown Trout movement in a restored Appalachian watershed. Annual Meeting of the Southern Division of the American Fisheries Society. February 18-19, 2016. Wheeling, WV.
- *Trego, C. T, E. R. Merriam, and J. T. Petty. 2016. Multi-scale habitat use by brook trout and brown trout in a restored Appalachian stream. Annual Meeting of the Southern Division of the American Fisheries Society. February 18-19, 2016. Wheeling, WV.
- *Merriam, E. R. and J. T. Petty. 2016. Use of telemetry, genetics, and isotope analysis to characterize brook trout response to culvert replacement in an Appalachian watershed. EcoStream Conference. August 22-25, 2016. Asheville, NC.
- *Harris, B. J. and J. T. Petty. 2016. Large scale dispersal of brook trout in a restored watershed. EcoStream Conference. August 22-25, 2016. Asheville, NC.
- *Trego, C. T., J. T. Petty, and E. R. Merriam. 2016. Evaluation of salmonid habitat use before and after a multi-scale habitat enhancement project. EcoStream Conference. August 22-25, 2016. Asheville, NC.
- Kinder, P. J., J. T. Petty, and E. R. Merriam. 2016. Watershed-scale brook trout restoration efforts within a high-elevation Appalachian stream network. EcoStream Conference. August 22-25, 2016. Asheville, NC.
- *Anderson, A. M., and J. T. Petty. 2015. Fish IBI scores and TDS effects on game vs. sensitive fishes. West Virginia Mine Drainage Task Force Symposium. March 31-April 1, 2015. Morgantown, WV.
- *Merriam, E. R., and J. T. Petty. The Appalachian stream syndrome: metacommunity deflation of stream invertebrate assemblages caused by interaction of mining and urbanization. Annual Meeting of the American Fisheries Society. August 15-21, 2014. Portland, OR.

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- *Harris, B.J., and J. T. Petty. 2015. Management in response to climate change: brook trout movement in a restored Appalachian headwater stream. Mid-Atlantic Regional Water Conference. September 24-25, 2015. Stonewall Jackson Resort, WV.
- *Merriam, E. R., and J. T. Petty. 2015. Complex local conditions and regional metacommunity degradation. Mid-Atlantic Regional Water Conference. September 24-25, 2015. Stonewall Jackson Resort, WV.
- *Trego, C. T., and J. T. Petty. 2015. Ecological response to brook trout habitat restoration. Mid-Atlantic Regional Water Conference. September 24-25, 2015. Stonewall Jackson Resort, WV.
- *Anderson, A. M., and J. T. Petty. 2014. Identifying least impacted streams and modeling reference conditions for fish IBI development. Annual Meeting of the American Fisheries Society. August 15-21, 2014. Quebec City.
- *Anderson, A. M., and J. T. Petty. 2014. Identifying least impacted streams and modeling reference conditions for fish IBI development. Mid-Atlantic Regional Water Conference. September 24-25, 2014. Shepherdstown, West Virginia.
- *Huntsman, B.M., J.T. Petty, and K.J. Hartman. 2014. Habitat selection in an Appalachian brook trout population explained by riverscape energetics. Meeting of the American Fisheries Society Alaskan Division. October 20-24, 2014. Juneau, AK, USA.
- *Huntsman, B.M., J.T. Petty, and S. Sharma. 2014. Identifying connectivity differences between habitats of a brook trout metapopulation using stable isotope analysis. American Fisheries Society Southern Division. January 22-26, 2014. Charleston, SC, USA.
- *Merriam, E. R., J. T. Petty, and B. Huntsman. 2014. Brook Trout metapopulation restoration in an Appalachian watershed. Wild Trout Symposium XI. September 22-25, 2014. West Yellowstone, MT.
- *Merriam, E. R. and J. T. Petty. 2014. Brook Trout metapopulation restoration in an Appalachian watershed. Ernie Nestor Chapter of Trout Unlimited. September 9, 2014. Charleston, WV.
- *Merriam, E. R. and J. T. Petty. 2014. The Appalachian stream syndrome: complex local and regional conditions in multistressor riverscapes. Annual Meeting of the American Fisheries Society. August 15-21, 2014. Quebec City.
- *Miller, E., and J. T. Petty. 2014. Ecological and Physical Benefits of Compensatory Stream Mitigation in an Intensively Mined Watershed. Annual Mid-Atlantic Water Conference. September 24-25,2014. Shepardstown, WV.
- *Miller, E., and J. T. Petty. 2014. Ecological and Physical Benefits of Compensatory Stream Mitigation in an Intensively Mined Watershed. Annual Meeting of the American Fisheries Society. August 15-21, 2014. Quebec City, Canada.
- *Miller, E., and J. T. Petty. 2014. Ecological and Physical Benefits of Compensatory Stream Mitigation in an Intensively Mined Region. Annual Southern Division of the American Fisheries Society. January 22-25, 2014. Charleston, SC.
- *Anderson, A. and J. T. Petty. 2013. Fish metacommunity response and watershed scale consequences of localized impacts within the mountain top mining region of West Virginia. Society of Freshwater Science. Jacksonville, Florida. May 2013.
- *Huntsman, B.M., and J.T. Petty. 2013. Brook trout metapopulation structure within a complex riverscape. Society for Freshwater Science Meeting. Jacksonville, FL. May 19-23.
- *Merriam, E. R., J. T. Petty, M. P. Strager, A. Maxwell, and P. Ziemkiewicz. 2013. Complex land use thresholds and multistressor impacts to streams in the MTR-VF mining region of central Appalachia. Society of Freshwater Science. Jacksonville, FL. May 2013.
- *Miller, E. and J.T. Petty. 2013. Predicting mitigation outcomes in mined Appalachian watersheds using BRT. National Society of Freshwater Science, Jacksonville, FL. May 2013.

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- *Miller, E. and J.T. Petty 2013. Ecological Benefits of Compensatory Stream Mitigation in Southern West Virginia .Society of Ecological Restoration -Mid Great Lakes. Wooster, OH. April 2013
- *Merriam, E. R. and J. T. Petty. 2013. Multi-stressor impacts to streams in the MTR-VF mining region of WV and implications for watershed restoration. Society for Ecological Restoration Midwest-Great Lakes Chapter. Wooster, OH. April 2013.
- *Miller, E., A. Anderson, and J.T. Petty. 2013. The Little Coal River. Madison Middle School. Madison, WV. March 2013.
- *Huntsman, B.M., and J.T. Petty. 2013. Brook trout patch use within sink habitat: Relative Importance of competition, mass effects, and source distance. American Fisheries Society OH-WV Joint Meeting. Huntington, WV. February 19-21.
- *Artis, C., and J. T. Petty. 2012. Interactive spatial database of compensatory stream mitigation in the southern WV coalfields. Northeast Association of Fish and Wildlife Agencies. Charleston, WV. January 2012.
- *Huntsman, B. M., and J. T. Petty. 2012. Brook trout population regulation within a complex Appalachian riverscape. Northeast Association of Fish and Wildlife Agencies. Charleston, WV. January 2012.
- *Merriam, E. R., and J. T. Petty. 2012. Downstream effects of mountaintop mining: context matters. Northeast Association of Fish and Wildlife Agencies. Charleston, WV. January 2012.
- *Anderson, A., and J. T. Petty. 2012. Use of landscape data to identify potential reference sites for fish IBI development. American Fisheries Society 142nd Annual Meeting. St. Paul, MN. August 2012.
- *Clingerman, J., J. T. Petty, M. P. Strager, and F. Boettner. 2012. Translating modeled data into GIS: details of the boosted regression tree modeling process for the Midwest Regional Fish Habitat assessment. American Fisheries Society 142nd Annual Meeting. St. Paul, MN. August 2012.
- *Huntsman, B. M., and J. T. Petty. 2012. Brook trout population regulation within a complex Appalachian riverscape. American Fisheries Society 142nd Annual Meeting. St. Paul, MN. August 2012.
- *Merriam, E. R., and J. T. Petty. 2012. Downstream effects of mountaintop mining: context matters. American Fisheries Society 142nd Annual Meeting. St. Paul, MN. August 2012.
- *Miller, E., and J. T. Petty. 2012. Ecological benefits of compensatory stream mitigation in southern West Virginia watersheds. American Fisheries Society 142nd Annual Meeting. St. Paul, MN. August 2012.
- *Anderson, A., and J. T. Petty. 2012. A fish-based IBI for WV wadeable streams. WV Water Research Symposium. Morgantown, WV. October 2012.
- *Artis, C., and J. T. Petty. 2012. Interactive spatial database of compensatory stream mitigation in the southern WV coalfields. WV Water Research Symposium. Morgantown, WV. October 2012.
- *Franks, J. and J. T. Petty. 2012. Survey of recreational users perceptions of water quality in WV rivers. WV Water Research Symposium. Morgantown, WV. October 2012.
- *Miller, E., and J. T. Petty. 2012. Ecological benefits of stream mitigation is constrained by water quality and regional conditions. WV Water Research Symposium. Morgantown, WV. October 2012.
- *Tincher., and J. T. Petty. 2012. Models linking climatic data to stream water temperature in a central Appalachian watershed. WV Water Research Symposium. Morgantown, WV. October 2012.

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PROFESSIONAL SOCIETIES

American Fisheries Society, AFS

American Society of Ichthyologists and Herpetologists, ASIH

Association of Southeastern Biologists, ASB

Ecological Society of America, ESA

North American Benthological Society, NABS

EDITORIAL DUTIES

Editorial Board Member

Fishes

September 2014 - present

Associate Editor

Transactions of the American Fisheries Society September 2011 – December 2016

Associate Editor of Fisheries

Proceedings of the SE Association of Fish and Wildlife Agencies January 2007 – 2008

Fisheries Editorial Committee

Proceedings of the SE Association of Fish and Wildlife Agencies 2002, 2006, and 2009

Refereed articles for the following journals:

Canadian Journal of Fisheries and Aquatic Sciences

Copeia

Ecography

Ecological Applications

Ecological Research

Ecology of Freshwater Fish

Environmental Biology of Fishes

Environmental Science and Technology

Environmental Toxicology and Chemistry

Hydrobiologia

Journal of Ecological Engineering

Journal of Environmental Management

Journal of Fish Biology

Journal of Fish and Wildlife Management

Journal of the North American Benthological Society

North American Journal of Fisheries Management

Oikos

PLoS One

Restoration Ecology

Science of the Total Environment

Southeastern Association of Fish and Wildlife Agencies

Transactions of the American Fisheries Society

Trends in Ecology and Evolution

Water Research

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PROFESSIONAL APPOINTMENTS

2015 – present	Editorial Board – Fishes
2011 – 2016	Associate Editor – Transactions of the American Fisheries Society
2011 – 2016	Member (Nationally Nominated) – Chesapeake Bay Program – Habitat Implementation Workgroup
2011 – 2012	Panel Member (Nationally Nominated) – Fulbright Scholars Program
2011 – 2012	Member (Nationally Nominated) – Appalachian Landscape Conservation Cooperative's Conservation Priorities Science Needs Workgroup
2010 – 2012	Member (Nationally Nominated) – USEPA Science Advisory Board – Ecological Impacts of Mountaintop Removal Mining and Valley-Fill
2009 – 2011	President – WV Chapter of the American Fisheries Society
2007 – 2009	Associate Editor – Proceedings of the SE Association Fish and Wildlife Agencies
2005 – 2011	Chairperson – WV Brook Trout Conservation Workgroup
2005 – 2009	Member (Nationally Nominated) – Habitat Subcommittee of the Eastern Brook Trout Joint Venture
2005 – 2011	Member – Mid-Atlantic Stream Restoration Workgroup
2005 – 2007	Chairperson – Mid-Atlantic Stream Restoration Workgroup
2001 – 2008	Member – American Society of Ichthyology and Herpetology, Environmental Quality Committee

OTHER PROFESSIONAL SERVICE

UNIVERSITY:

Director - WVU Chapter of the National Council for Science and the Environment EnvironMentors Program May 2011 – 2017

Director - WVU Peace Corps Master's International Program in Sustainable Forestry and Natural Resources October 2010 – 2018

Chairperson - WVU Faculty Senate Curriculum Committee August 2010 – August 2011

Chairperson - WVU Graduate Council August 2010 – August 2011

Member - WVU Faculty Senate Executive Committee August 2010 – 2011

Chair-Elect - WVU Faculty Senate Curriculum Committee August 2009 – August 2010 Petty Vitae: page 31 of 32

Member - WVU Faculty Senate
August 2009 - August 2011

Member - WVU Graduate Council September 2008 – August 2011

Member - WVU Davis College Graduate Council September 2008 – 2013

Member - WVU Division of Forestry and Natural Resources, Promotion and Tenure Committee December 2007 – 2008

Member - WVU Division of Student Affairs University-Wide Committee on Student Retention (ROSS)

December 2007 – 2010

*Chairperson - WVU Division of Forestry and Natural Resources, Curriculum Committee*January 2005 – 2008

Member - Davis College Library Committee January 2003 – 2008

Dimension Chairperson - Foundations of Excellence / WVU First Year Experience September 2006 – August 2007

Member - WVU Division of Forestry, Space Committee
October 2002 – December 2003

Chairperson - Davis College Classroom Environment Committee January 2002 – May 2007

Program Director - WVU, Division of Forestry Enrichment Series
August 2001 – December 2003

PROFESSIONAL:

Member - Chesapeake Bay Program-Habitat Implementation-Stream Workgroup August 2010 - present

Member - USEPA Science Advisory Board Panel – Ecological Impacts Associated with Mountaintop Mining and Valley-Fill Operations

May 2010 - 2011

President - West Virginia Chapter of the American Fisheries Society
March 2009 – 2010

Affiliate- Downstream Strategies
August 2010 – 2015

Technical Advisor - Friends of Deckers Creek January 2008 – 2015

Associate Editor - Fisheries Section, Proceedings of the SE Association of Fish and Wildlife Agencies January 2007 – December 2008

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- *Technical Advisor* WV Abandoned Mine Land Stream Restoration Advisory Group January 2007 December 2008
- Chairperson West Virginia Brook Trout Conservation Working Group January 2005 2010
- *Member* Habitat Subcommittee of the Eastern Brook Trout Joint Venture October 2005 – 2010
- Steering Committee Member Mid-Atlantic Stream Restoration Working Group May 2007 2010
- Technical Advisor West Virginia State Trout Stream Designation Working Group June 2006 – 2009
- Chairperson Mid-Atlantic Stream Restoration Working Group January 2005 – April 2007
- *Member of Board of Directors* Friends of Deckers Creek June 2002 – 2010
- Committee Member American Association of Ichthyologists and Herpetologists
 Environmental Quality Committee
 June 2001 December 2008
- Steering Committee Member

WVU / CVI / USEPA Conference: Community Revitalization and Ecological Restoration January 2004 – December 2006

- Technical Team Member Cheat River TMDL / WQ Trading Stakeholder Group January 2002 December 2004
- Technical Team Member West Virginia Statewide WQ Trading Stakeholder Group January 2002 December 2004
- Committee Chair Research Committee of the Upper Shavers Fork Partners Group June 2000 December 2004