On March 1-3, 2016, the College of Agricultural Sciences together with other partners hosted the Pennsylvania in the Balance Conference in Hershey, Pennsylvania. Over 120 diverse stakeholders attended the event, which provided a collaborative forum where motivated leaders in agriculture and the environment identified new, innovative solutions that can help ensure vibrant, productive agriculture while meeting water quality goals for Pennsylvania’s rivers and streams and the Chesapeake Bay.

At the end of three days, clear themes and initial recommendations emerged which, if seized upon, can form the basis of a new consensus based, collaborative strategy to ensure profitable and productive agriculture while achieving water quality goals. This strategy embraces agriculture and its ingrained culture of stewardship, and looks for leadership from agriculture to be a solution to clean water.
Themes identified at Pennsylvania in the Balance include:

**Embrace a Culture of Stewardship.** Agriculture has high standards for conservation, with roots in a multigenerational culture of stewardship. Farmers desire to be the solution for clean water, and do not condone poor managers who are causing water quality problems. Programs to recognize and reward farmers meeting high conservation standards have strong appeal and may help raise the conservation bar.

**Develop and Deploy Effective Targeting.** Targeting limited resources to areas of high priority is essential. Effective targeting includes elements of all “3 Ps” – place, practices, and people. Place-based targeting should use the best available science and mapping along with local knowledge. There should also be a focus on key demographics (small dairy, Plain Sect, part-time farmers, equine, and vegetable growers) and key practices (no till, cover crops, forest riparian buffers, and manure management.)

**Integrate Soil Health, Manure Management, and Riparian Ecosystem Stewardship into Water Quality Strategies.** The health of the land and water is critical to meeting both farm production and conservation needs. Approaches based on performance through land and water stewardship should be emphasized over practice based approaches. Soil health, management of manure as a resource, and stewardship of riparian ecosystems need to be priority messages. Clean and abundant water starts with soil health and function. Plans required by law must be meaningful management tools that are simple to develop and follow. Programs for forest riparian buffers must be highly incentivized, streamlined and flexible.

**Support Community Based Approaches.** Local and regional community based approaches work: most if not all Pennsylvania success stories to date are locally led. There is a critical need to foster more community based approaches that are farmer led, involving producers who are “thought leaders” in the community, and which build farmer-to-farmer support networks.

**Recognize and Support a Three Pronged Approach.** A three pronged approach is needed to accelerate adoption of conservation practices within the agricultural community: education and outreach; technical assistance; and enforcement. All three are important and complimentary, and the approach will work best if clear roles are defined and maintained, based on respective expertise and existing relationships. Challenges in meeting technical assistance demands must be overcome. Opportunities to enhance conservation training and build it into educational curriculum should be pursued. Support exists for selective, meaningful enforcement that targets bad actors with threats that are real and carried through to ensure all producers are managing operations consistent with protection of local waters.

**Revisit and Retool Conservation Incentive Programs.** Several existing programs work well and should continue to serve as the core of conservation incentive programs. However, a willingness exists to revisit existing programs—such as forest buffer programs—to improve delivery, and explore innovative new incentive structures. Support exists to develop more strategic policies to offer—and withhold—incentives to influence action by those not in compliance.

**Collaboratively Seek New Funding Opportunities.** While being more strategic in spending existing resources is critical, existing funding is insufficient. New funding opportunities were identified and should be pursued. There was strong support for the formation of a diverse and inclusive coalition to develop and campaign for a collaborative new water quality funding strategy.
Since the conference, the Penn State Agriculture and Environment Center (AEC) has taken the lead in advancing conference ideas into action. The conference planning committee was reconvened in April 2016 to develop an action plan and framework for moving forward recommendations. In April and May 2016, key state and federal agencies were debriefed in a series of meetings, at which conference outcomes were presented and ideas for priority initiatives were discussed. Further feedback was solicited at several listening sessions held in August 2016 at Ag Progress Days.

A one day workshop, *PA in the Balance: The Reconvening*, was held on October 12, 2016. Approximately 100 participants, including original conference attendees and new stakeholders, participated in two working sessions where priority initiatives and key action steps were identified.

The resulting recommendations from conference and post-conference discussions include the development of an implementation framework consisting of an informal, collaborative partnership facilitated by the AEC. The *PA in Balance Partnership Council* which includes key agricultural and conservation stakeholders, including producer representation, is proposed to serve as the steering committee for this partnership moving forward.

**Priority initiatives:**

1. **Increase Technical Capacity through Enhancements in Conservation Training Opportunities**

2. **Develop and Disseminate a Narrative Around a “Culture of Stewardship” through Soil and Stream Health**

3. **Develop New and Creative Incentives to Encourage a High Bar of Conservation Beyond Compliance**

4. **Develop and Deploy Delivery Mechanisms for Accelerating Conservation in Priority Watersheds**

Four initiatives, representing items which attendees and stakeholders agreed were priorities for action, are proposed. Each of these initiatives will be led by individuals and organizations in Pennsylvania with expertise and commitment to advance plans to action. These initiatives are:

**Initiative 1. Increase Technical Capacity through Enhancements in Conservation Training Opportunities.** These enhancements will complement existing USDA Natural Resources Conservation Service (NRCS) and state training programs to build the technical network of conservation professionals necessary to meet increased farmer demand for developing plans and implementing their associated conservation practices. Partners will explore development of training offerings to fill identified gaps and streamline training for interested professionals, as well as students within existing course offerings and degree and/or certificate programs. Farmer-to-farmer approaches and community, technical and vo-ag schooling opportunities will also be pursued.

**Initiative 2. Develop and Disseminate a Narrative Around a “Culture of Stewardship” through Soil and Stream Health.** The exciting new consensus based, collaborative strategy that has emerged from the conference embraces agriculture and its ingrained *culture of stewardship*, which constitutes the overarching theme infusing the entire partnership’s work moving forward. We are looking to agriculture for leadership and to be the solution for clean water. By promoting this new narrative of stewardship, we will move all farmers from looking at conservation as something they have to do to something they want to do. This narrative will be developed through a strategic communications plan and communicated using traditional and modern, multimedia communication tools and approaches.

The hallmark of this narrative will be a farmer led effort to promote soil and stream health on the farm. This statewide education and outreach initiative will seek to involve producers, conservation technicians, Extension educators, nonprofits, and the ag industry. It will build off of successful farmer-led efforts and agency initiatives which promote water quality-based conservation practices in the broader context of maintaining soil health and economic
profitability. A holistic approach to on-farm conservation will be taken, integrating soil health with manure management and riparian ecosystem stewardship. This initiative will work with farmers to comply with state regulatory requirements in a way that is good for long-term profitability of the farm, water quality, and stream health.

**Initiative 3. Develop New and Creative Incentives to Encourage a High Bar of Conservation Beyond Compliance.** An agricultural certification program will recognize and reward producers who have reached a high bar of conservation. Recognition based, certainty based and market based incentives will all be explored to encourage producers to pursue certification.

Recognition based incentives acknowledge that farmers appreciate being recognized and rewarded for reaching high conservation standards within the industry. Recognition can also motivate peers to raise their conservation bar.

Acknowledging the need for the bar to be well above existing regulatory requirements and that those existing requirements cannot be relaxed, the linking of certification to a Pennsylvania ag certainty program will also be explored. This program will incentivize farmers to voluntarily accelerate implementation of practices that help meet local and Bay water quality goals.

Potential exists also for the certification program to be linked to product branding and “clean water” supply chains to meet corporate sustainability goals. The agricultural and food industry will be engaged to discuss consideration of these certifications in food supply chain management, marketing products, and corporate sustainability practices, providing market drivers for conservation practices on farms.

**Initiative 4. Develop and Deploy Delivery Mechanisms for Accelerating Conservation in Priority Watersheds.** Conference attendees emphasized the importance of focusing efforts in priority watersheds, where nutrient loads are high, local impairments exist, and local efforts are underway and can be built upon. To succeed in this prioritization effort, delivery mechanisms need to be developed and supported, including technical assistance in developing watershed plans which identify the right practices to be implemented in the right places, investment in partnership development and partnership management infrastructure, and the cultivation of and support for local leadership through watershed leadership training.

Pennsylvania success stories are almost always locally led. This initiative seeks to transform local success stories from the pilot nature it is now to the standard operating procedure for achieving water quality goals in the Commonwealth so that a network of local watershed leaders exists to sustain long-lasting partnerships in priority watersheds.

This initiative embraces the three-pronged approach to accelerating conservation implementation by creating local partnerships that first deploy the necessary education, outreach, and technical assistance to implement practices, and only turn to enforcement where non-compliers are given the opportunity but do not respond to these local partnership strategies. It enhances and accelerates the implementation of conservation where it is needed the most, and deploys a smart strategy of delivering a variety of leveraged program dollars to implement priority practices in an efficient, cost effective manner.