**White House Drought Symposium - Summary**

**Washington D.C. - July 15, 2015**

On July 15, 2015 the National Drought Resilience Partnership (NDRP) hosted the White House Drought Symposium in Washington D.C. The Symposium was organized by the Council on Environmental Quality, the US Department of Interior, the US Department of Agriculture, the Department of Commerce (National Oceanic and Atmospheric Administration), the Stanford Woods Institute, the Theodore Roosevelt Conservation Partnership, and the Iowa Soybeans Association. The Symposium brought together a small group of high-level experts on water and drought issues at all levels of government, academia, the agricultural sector, conservation organizations, and the private sector.

The Symposium was organized around two topics: 1) Watershed Community Drought Planning and Resilience; and 2) Leveraging and Coordination of Public, Non Profit and Private Innovation and Investments. The following is a summary of the key themes, suggestions for Federal action offered by individual Symposium participants, and the National Drought Resilience Partnership’s next steps.

**Key Themes from July 15th Drought Symposium:**

1. **TOPIC 1: Watershed Community Drought Planning and Resilience:** Improving drought resilience is complicated by the multiplicity of entities involved in managing, providing, and regulating water resources. While the critical geographic unit for water management and drought resilience is the watershed, many water suppliers and management agencies are local in nature, and share watersheds with other such agencies. States have primary responsibility and legal jurisdiction over water rights and management, while most watersheds cross state boundaries. Overlaying this basic structure, a web of state and Federal agencies, regulations, and programs affects water resources. These include water quality regimes, fish and wildlife programs, state and Federal endangered species laws, and agricultural programs. We need to plan for droughts in ways that provide for human needs while preserving environmental quality and ecosystems, and requires agencies, water users, and water providers to work across geographic and jurisdictional boundaries to achieve watershed scale solutions.
2. **Fragmentation of Federal programs is a barrier to stakeholders/applicants in identifying relevant Federal programs, funding, technical assistance, etc., and makes it difficult to apply resources where they can have the most impact.**

The Federal government could coordinate federal programs better to provide a user-friendly gateway of easily accessible/transparent drought programs and funding mechanisms to help stakeholders, particularly farmers, to decipher what Federal programs are available to them and most applicable to their situation. This list would include FEMA pre-disaster planning, financing options (grants, support for standing up ecosystem service markets), and any additional helpful drought programs.

1. **The greatest chance of success in watershed community drought planning and resilience occur:**
* **In watersheds where a wide range of stakeholders is working collaboratively to find solutions (shorthand label: “Intact Watershed Process”):** Drought resiliency must be addressed on a watershed level. Unless and until key stakeholders are able to collaborate on ways to improve drought resilience, little progress can be made. Federal agencies have programs to encourage local creation of intact watershed processes; the Bureau of Reclamation’s basin study process and Cooperative Watershed Management Program are good examples.
* **When restoring hydrologic function at a basin or watershed scale creates conditions that produce “stacked” benefits, including increased water supply and enhanced watershed services.** Federal resources need to prioritize solutions that address challenges at hydrological scales to improve entire ecosystems and increase drought resilience. In locations where multiple benefits or multiple financing vehicles can be “stacked” on top of one another or can leverage each other, it will be easier to obtain both financing and a broad base of stakeholder support.

The Federal government could:

* + Pursue “stacked” investments through things like leveraged Federal programs or leveraged Federal-state-NGO-other stakeholder efforts (Western Watershed Enhancement Project; WaterSMART-EQIP Irrigation Efficiency Initiative; RCPP; EQIP-CalSWEEP).
	+ Leverage resources at multiple scales (e.g., on-farm conservation planning (NRCS); watershed/sub-watershed planning (NRCS-PL 566); WaterSMART/ irrigation districts; (BOR); basin planning (BOR)).
	+ Tap into different funding sources, e.g., dam safety actions stacked with work to increase amount of water storage.
1. **Federal participation in ‘Intact Watershed Processes’ can help to speed up the process of making major investments to address drought resilience by either INCREASING POSITIVE INCENTIVES for such actions or DECREASING INCENTIVES FOR INACTION, or both**
* **Incentives** can come in many forms-- increased Federal financial, technical, or other assistance; speeded up/streamlined regulatory and permitting processes.
	+ Incentives should be provided to applicants/stakeholders who present the best prospects for success.
	+ Incentives should be provided for increased private investment-- by providing loan guarantees, credit enhancement, demonstrating successful pilot projects, etc.
* One example of the Federal government being successful in creating an intact process is with the Yakima Water Basin. The investment in this basin brought together actors that were already present in the basin with non-profit, state, Federal, local, and other actors to create the mechanism and support to have a broader basin dialogue. Federal agencies tend to approach things narrowly, but in order to take advantage of this intact watershed process it's required of these Federal agencies to show up and recognize that efforts must be packaged in a clear and accessible way**.**

**Disincentives** from the Federal government often come in the form of regulatory requirements-- ESA, Clean Water Act, etc**.**

1. **TOPIC 2: Leveraging and Coordinating Public, Non Profit and Private Innovation and Investments:** Greatly increased private investment is criticalto build drought resilience, e.g., infrastructure construction; development of innovative technologies and techniques for watershed restoration, water reuse, conservation and efficiency; and expanded water marketing. There are several trends driving the need for greater private financing: 1) Federal funding has been reduced and there is no reasonable prospect for it being significantly increased in the future; 2) climate change and population growth ratchet up the need for major financial investments in stabilizing and/or sustaining water supplies; and 3) the historic paradigm for water resource investment is over and we must design new avenues through which the Federal government can partner in water supply and watershed projects.
	* + 1. **Fragmentation of Federal programs is a barrier to stakeholders/applicants in identifying relevant Federal programs, funding, technical assistance, etc., and makes it difficult to apply resources where they can have the most impact.**

The Federal government could better coordinate federal programs to provide a user-friendly gateway of easily accessible/transparent drought programs and funding mechanisms to help stakeholders, particularly farmers, to decipher what Federal programs are available to them and most applicable to their situation. This list would include FEMA pre-disaster planning, financing options (grants, support for standing up ecosystem service markets), and any additional helpful drought programs.

* + - 1. **In addition to direct private financing, a full suite of other financing tools and leveraging opportunities could be explored**, **including**:
* Credit enhancement
* All options for direct Federal funding/cost-sharing
* Federal loan guarantees
* Bonds
* Excise taxes
* Payments for environmental benefits
* Federal tax deductions for in-stream flow donations.

**3. Measures could be taken to facilitate increased and more efficient water marketing.** Increasing capacity to move water around to locations where it is most needed and beneficial is critical both to meet needs of water users and to attract private investment. This can include institutional arrangements as well as physical infrastructure needed to provide flexibility for voluntary transfers among parties. USDA could assist by evaluating alternatives to agricultural fallowing, such as deficit irrigation and crop switching.

**4. The Federal government could continue to maintain and upgrade investments in improved data, monitoring and technology (DM&T).** Improved data allows improvements in water use efficiency and ecosystem health, among other things. Our ability to “stack” multiple benefits to ensure that water is conserved and used to best accomplish multiple goals requires current data and ongoing monitoring.Federal agencies could better collaborate, make data and information more accessible, and take into account private sector needs/opportunities (corporations, entrepreneurs/innovators). Potential DM&T improvements include:

* The Federal government could identify priority investments for DM&T.
* The Federal government could play a role in addressing the cultural divide in how municipalities and certain agencies share data, could set the standard for data collection and use.
* There is a need for both scientific and programmatic data. Who is getting what types of grants? This information could be useful in targeting programs in the future.

**5. Upgrading our nation’s aging water infrastructure** **is critical to the long term resilience of the nation’s water resources.** More modernized infrastructure enables us to manage water at a finer scale. This is an area where the Federal government can encourage private investment (use loan guarantees and other tools). The Federal government can encourage investments of aging infrastructure through four main areas: Agricultural, municipal commercial, environment and energy. The Federal government can stack benefits of certain projects into these areas, help prioritize funding and preselect those projects.

* Water storage:
	+ Proper infrastructure needs to be in place when water does arrive to store and create reservoirs
	+ Water storage can be geared towards flood prevention which can help prevent erosion following drought.
	+ The Federal government could rethink infrastructure and not focus on new dams but instead protect watersheds to increase the amount of water that is readily available.

**III. Potentially useful Federal actions.** In addition to the themes mentioned above, throughout the discussion, individual participants offered the following suggestions of potential Federal actions to achieve goals around watershed coordination and leveraging public and private investment:

1. The White House and/or Congress could take the following actions:
* Direct relevant Federal agencies to review and make recommendations for how their programs could be modified to support long term drought resilience. This would include identifying programs, rules, and criteria that have unintended consequences or encourage water waste.
	+ Direct Federal agencies to determine what would be needed as far as changes in statutory authorities that would allow Federal agencies to prioritize funding/expedite permitting/rank higher drought resilience projects in Intact Watershed Processes (described above).
	+ Direct Federal agencies to look at the Build America Initiative/Sandy Task Force recommendations to see what could be adapted to drought. Review existing programs and regulations to encourage “greener” approaches – encouraging groundwater recharge, water recycling, etc. Identify statutes, regulations that have unintended consequences as part of “doing no harm” and identify fixes.
1. Federal agencies could (1) create a Federal Drought Portfolio of the key programs and financing options for building long term drought resilience; and (2) develop a process for making those Federal resources more accessible to stakeholders.
2. Federal agencies could convene a multi-agency workshop to discuss the existing assets around DM&T, how Federal agencies can better leverage existing assets, identify future needs, and conduct a gap analysis. This could be done under the White House Office of Science and Technology Policy’s SWAQ (Subcommittee on water availability and quality).
3. The Federal government could convene a second symposium with stakeholders – agriculture, municipalities, utilities, irrigators, corporations and entrepreneurs- to discuss their data and science needs.

**IV**. **Next Steps:** The National Drought Resilience Partnership agencies will meet in the coming weeks to discuss and prioritize the potential Federal actions that were highlighted throughout the symposium and through subsequent feedback from participants. This will lead to the development of an NDRP ‘workplan’ to focus agency efforts around drought resilience over the next 18 months. This workplan will include specific goals and a timeline for implementation to improve transparency and accountability.