

- Our group would like to commend NOAA for creating this draft strategy and recognize them for their willingness in that plan to: (1) “convene” the partnerships needed to sustain a NCS and (2) begin the dialog on what NOAA’s role might be in a NCS.
- Our group sees a NCS spanning a range from the highest levels of the federal government to the local/regional decision maker -- we believe that partnerships are critical at each level of this continuum.
- For simplicity and to provide relevant info to NOAA, we discussed three specific levels that span this range:
 - Federal agencies dealing with the impacts of climate change on their missions
 - NOAA: an agency that is both a user and producer of basic climate information (observations, predictions, etc)
 - Local/Regional level decision makers dealing with mitigation and adaptation issues
- **Product:** We examined existing partnerships models at the three levels, the principles that made them successful, and made several partnership recommendations that address the principles.

Our View of Current “Three Level” Situation

- Federal mission agencies struggling to deal with the impacts of climate change and how it impacts their constituents. **Need an effective coordination mechanism.**
- Local/regional decision makers struggling to implement actions to mitigate and adapt to climate change
 - **Players:** private sector, RISAs, Regional Climate Centers, State Climatologists, State/Local governments, Ag extension, NWS WFOs, Forest Service offices, universities, etc.
 - **Needs:** Resources and coordination with the Federal level (e.g., data QA/QC and standards, tools, two-way flow of requirements, useful climate information, A NATIONAL STRATEGY, etc.).
- NOAA trying to figure out how it can best support user climate information needs at both of the levels above.

- **Two examples of why partnerships are critical (at all scales):**
 - **Data.** Data is owned across the full spectrum of federal agencies, local governments, universities, companies, etc. To collect and share this data effectively requires partnerships.
 - **Modeling.** Research and ops models must be better integrated – this takes partnerships (WRF partnership).

- **Examples of possible “partnership models” we discussed:**
 - Ozone Hole Research and ultimate policy decision
 - IPCC assessments
 - Environmental health teams that anticipate adverse health outbreaks (west nile, lyme, flu, etc)
 - USGCRP.
 - National Integrated Drought Information System (NIDIS)
 - Public chartered, Private Non-profits (NRP, CPB, Postal, AMTRAK).
 - UCAR/NCAR (501.c.3/FFRDC)
 - DARPA
 - RISAs
 - Wildfire Emergency Response Teams.

Success-oriented partnership “principles” from these examples:

- Really solid partnerships exist when the co-dependencies are strong – borne and sustained by mutual desperation.
- Must be a clear reason to join the partnership (incentives) and a partner must be able to “pay-to-play” (invested in the partnership)
- Ability to recognize where the federal (and other) role start and stop AND still be able to bridge the full national-local NCS spectrum
- Stay focused on “problems” so stakeholders will stay engaged (i.e., water, food, public health – not a NCS for NCS sake).
- Must maintain credibility with all stakeholders and balance stakeholder needs.
- There should be a governing board made up of major partners
- Must be able to sustain long-term networks and infrastructure
- Must have authority and resources to support single agenda: make the enterprise thrive

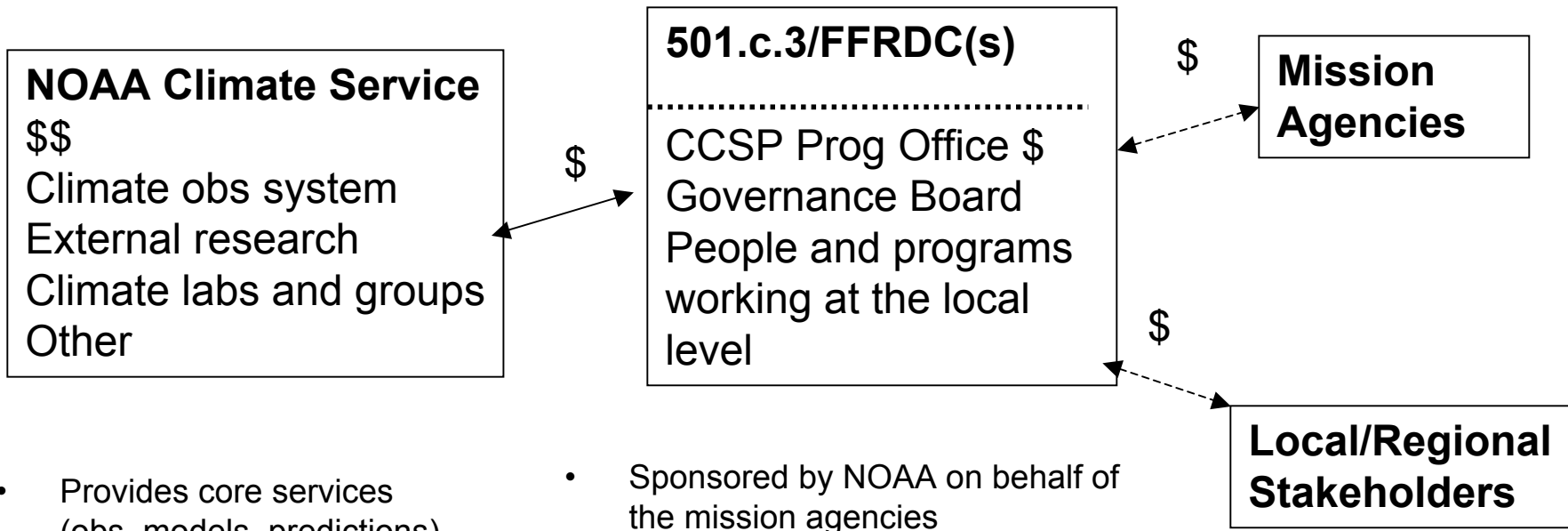
Success-oriented partnership “principles” from these examples:

- Must have strong leadership at all levels – from the White House to local/regional players and formal arrangements that transcends changing personalities.
- Must be nimble, constantly learning, and responsive:
 - Let a specific partner lead where/when it makes the most sense
 - Be able to receive/spend resources across public and private boundaries and have these agreements in advance
 - Must have incentive mechanisms (\$) to influence actions – regional activities that serve national interests (and visa versa).
 - Must be able to take advantage of international partnerships (WHO, WMO, GEOSS, etc)
 - Must be able to avoid complexities of operating in federal systems (e.g., FACA, procurement, HR, etc).

What NCS structure/partnerships could meet these principles?

How do you create a coherent national climate decision support system?

- **Federal agencies (including NOAA).** USGCRP V2.0 focused on climate services:
 - Identify priorities, requirements, gaps, and ways to help local/regional
 - Commitment to work together for needed resources
 - Formal structure to ensure permanence from changing leadership
 - **Note:** NOAA NCS SP offered to convene this. Pros/Cons?
- **NOAA.** NOAA needs to create a NOAA Climate Service that can provide basic climate information that is responsive to Federal agencies and local/regional user needs. (**NOAA is considering:** lots of options except status quo – do what makes sense now and let evolve to optimal state).
- **Local/Regional.** Need a mechanism to connect feds and local/regional players. Options:
 - NOAA has offered to do this and has made laudable efforts (RISA, NIDIS, etc)
 - NOAA could sponsor a non-profit/FFRDC(s) on behalf of agencies to be a key component(s) of this mechanism (addresses many principles).



- Provides core services (obs, models, predictions)
- Requires effective reorganization

- Sponsored by NOAA on behalf of the mission agencies
- Coordinates CCSP/USGCRP
- Have substantial “incentive” money
- Provides flexibility
- Helps connect all parties
- May have several with different focus (water, public health, etc)