



# *NASA and International Water Activities*

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Dave Toll, GSFC

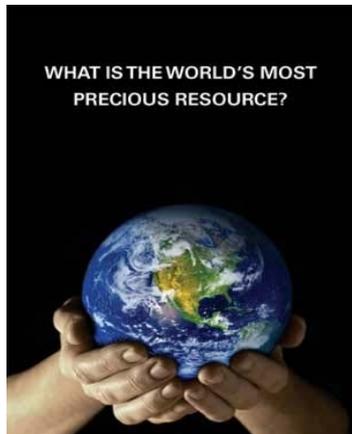




# NASA Water Resources & International Activities

## The NASA Water Resources Program:

Apply NASA Earth observations to improve the decision support systems of organizations and user groups that manage water resources. The ASP Water Resources application area partners with federal agencies, academia, private firms, and international organizations.



## Internationally:

- Remote sensing, and NASA's **free and open exchange of data** is particularly conducive to addressing water challenges (esp in data limited regions)
- Currently, we work closely with Capacity Building and Water and Energy Cycle Programs (priorities, meetings)
- Support ROSES projects and establish partnerships between agencies, organizations



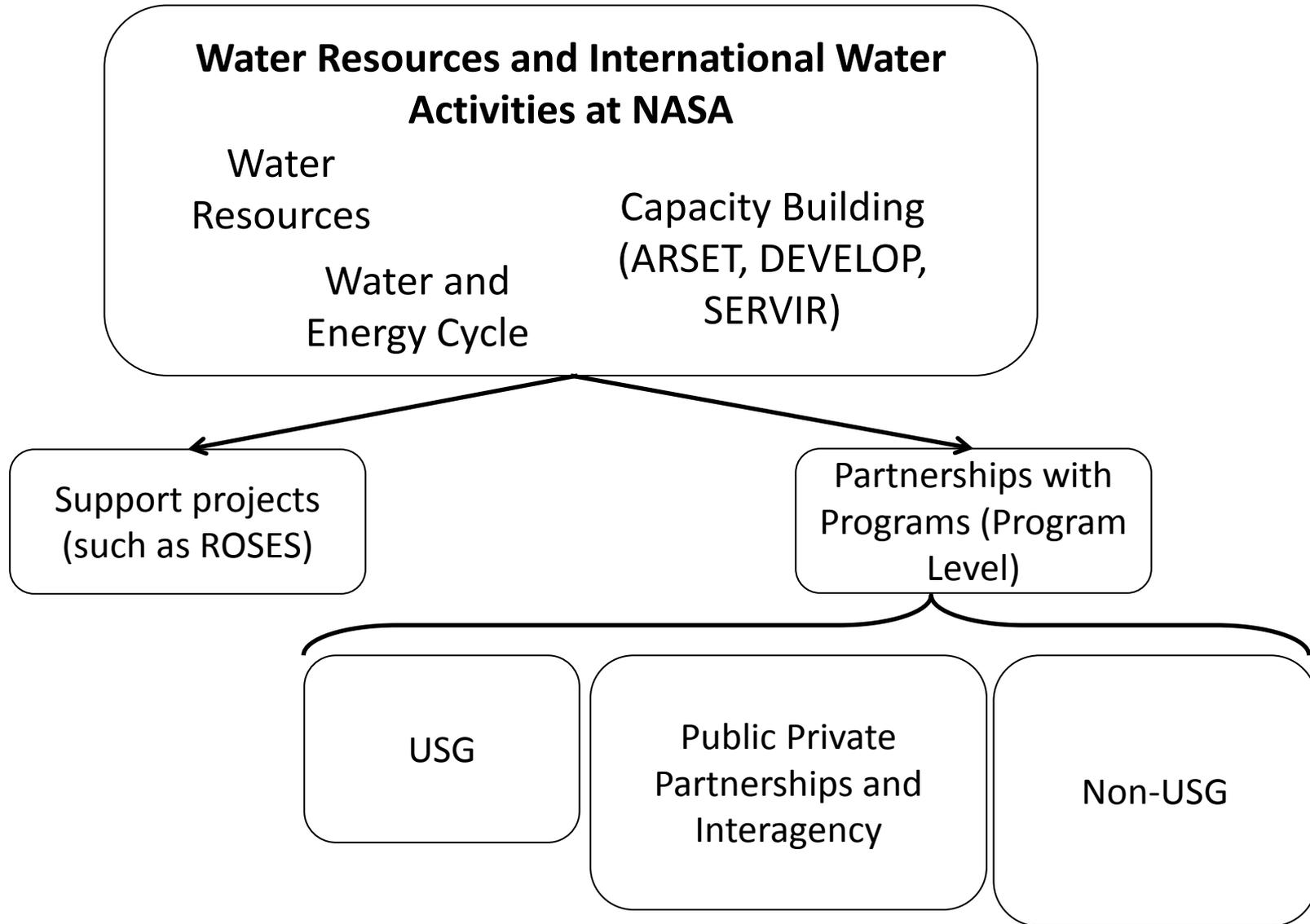


# Our approach toward a strategy

- NASA's role is to provide/support expertise and information: how does this fit into the larger international water community context?
- Limitation: we can't directly fund international investigators

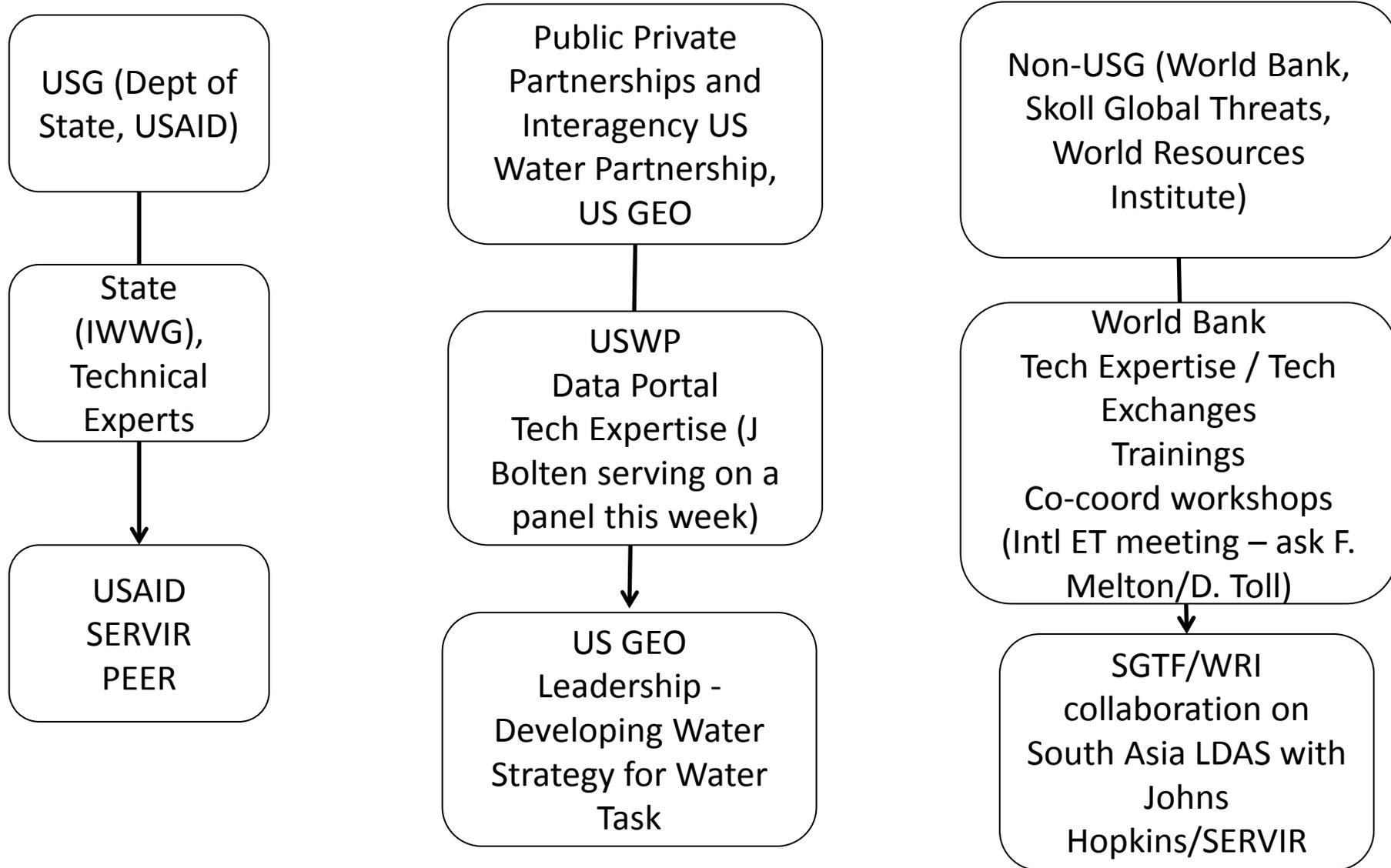


# Our approach



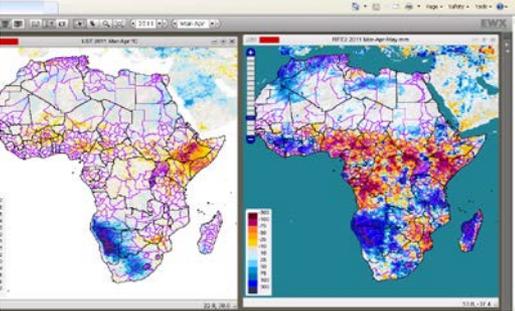


# Program Level Partnerships



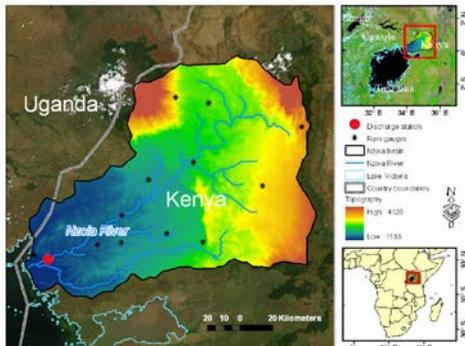


# Supporting projects



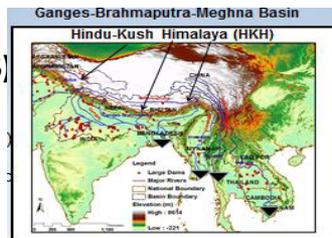
NASA & USGS Assisting USAID with Famine Early Warning System, see <http://earlywarning.usgs.gov> (Verdin/USGS)

NASA-USAID East Africa SERVIR -CREST Model Regional Water Balance and Flooding

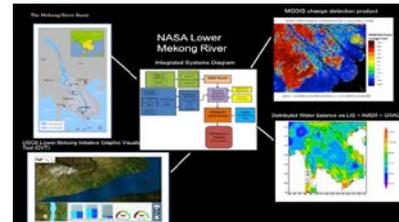


Support projects (such as through ROSES or SERVIR)

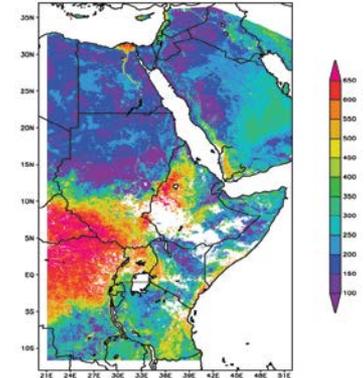
Flood Prediction Low Lying Deltas Himalayan



Hossain/UW



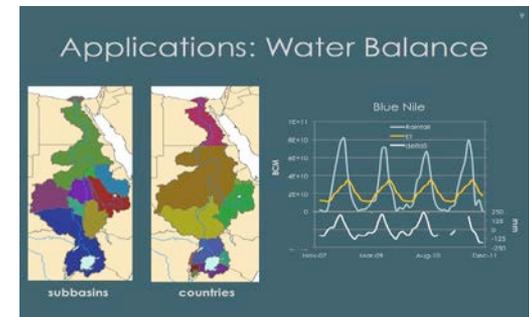
Regional Precipitation PERSIANN (Bolten/NASA), S. Sorooshian/UC Irvine



Normalized Evaporative Stress Index, Anderson/USDA



NASA-USDA-Univ MD Global Cropland Drought Monitoring Using MODIS (Justice, Becker-Reshef/U-MD)

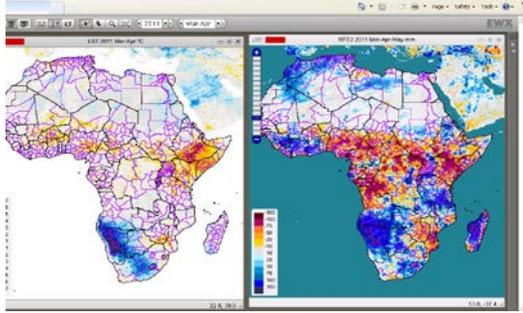


NASA Nile Basin Project Zaitchik/JHU



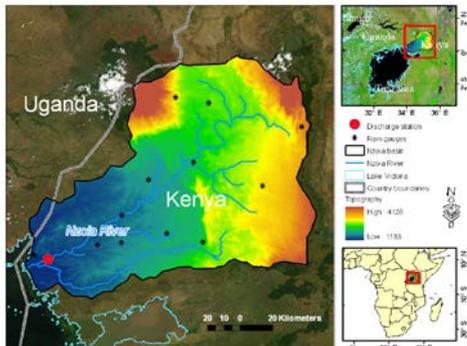
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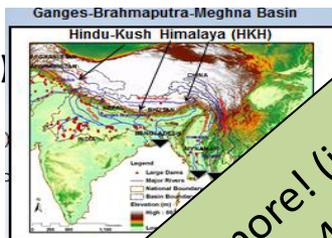


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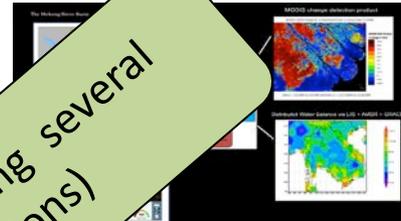
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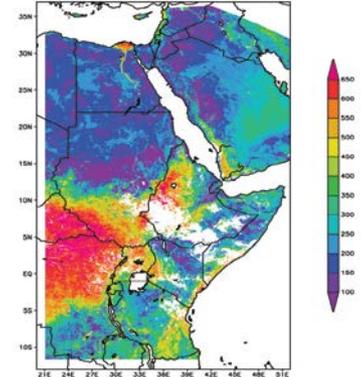
Flood Prediction Low  
Lying Deltas  
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And many more! (including several  
recent A45 selections)



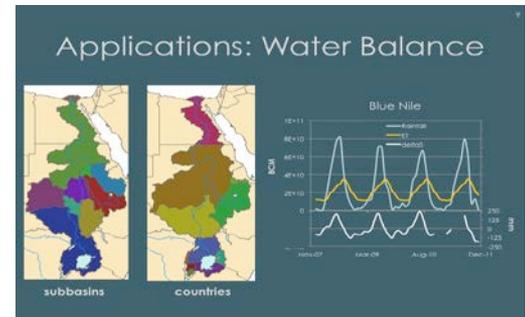
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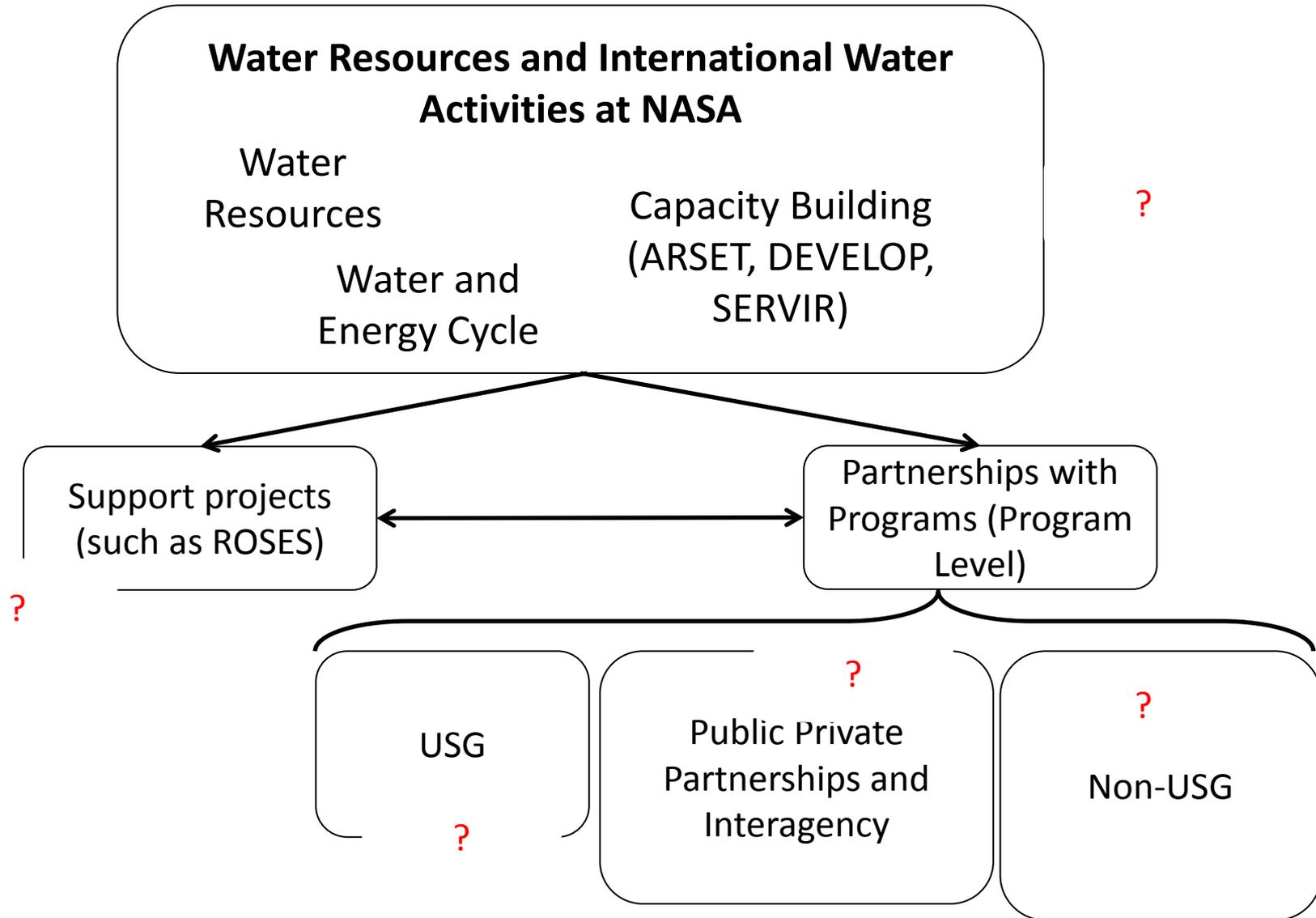
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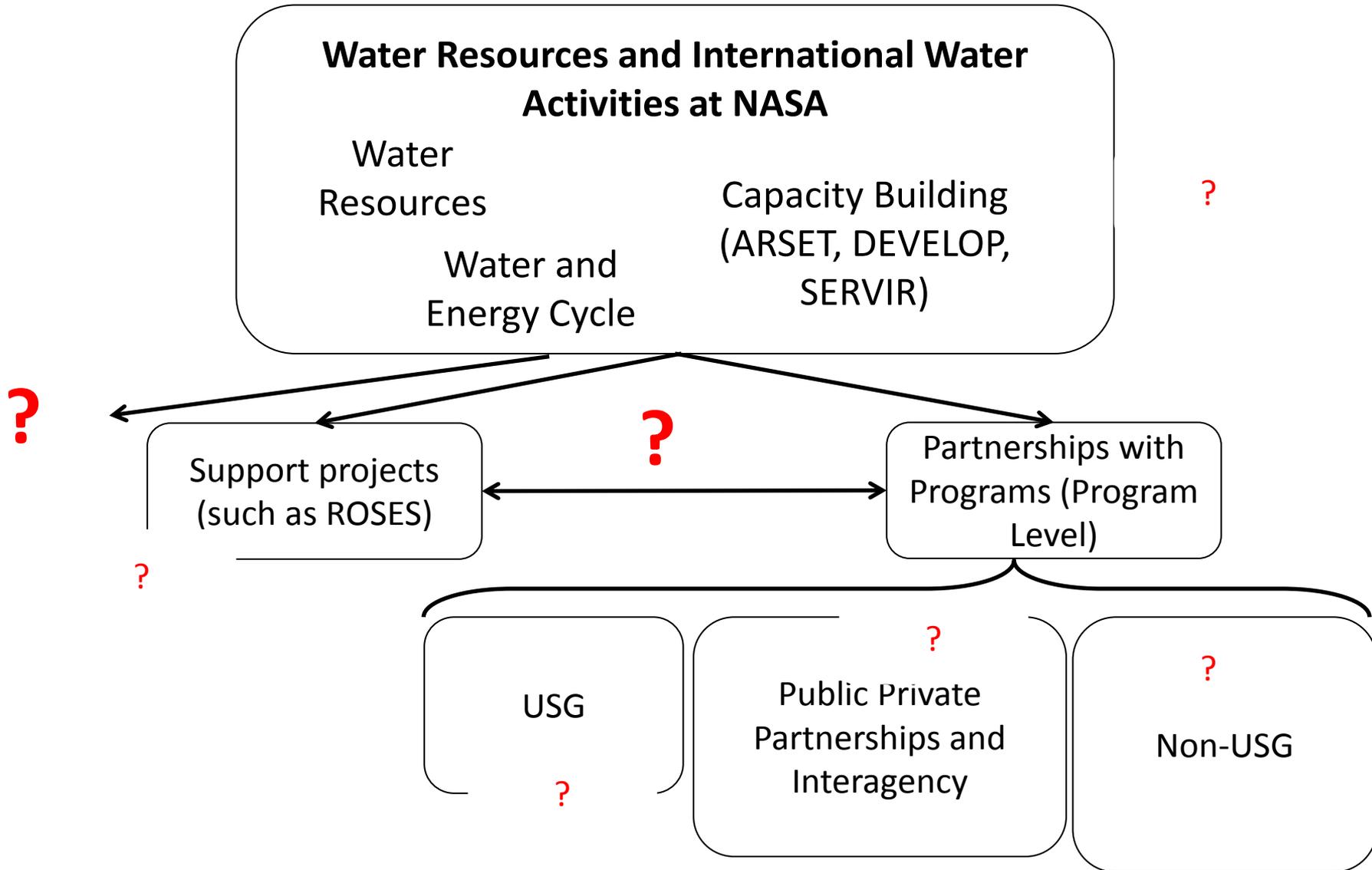


# Our approach





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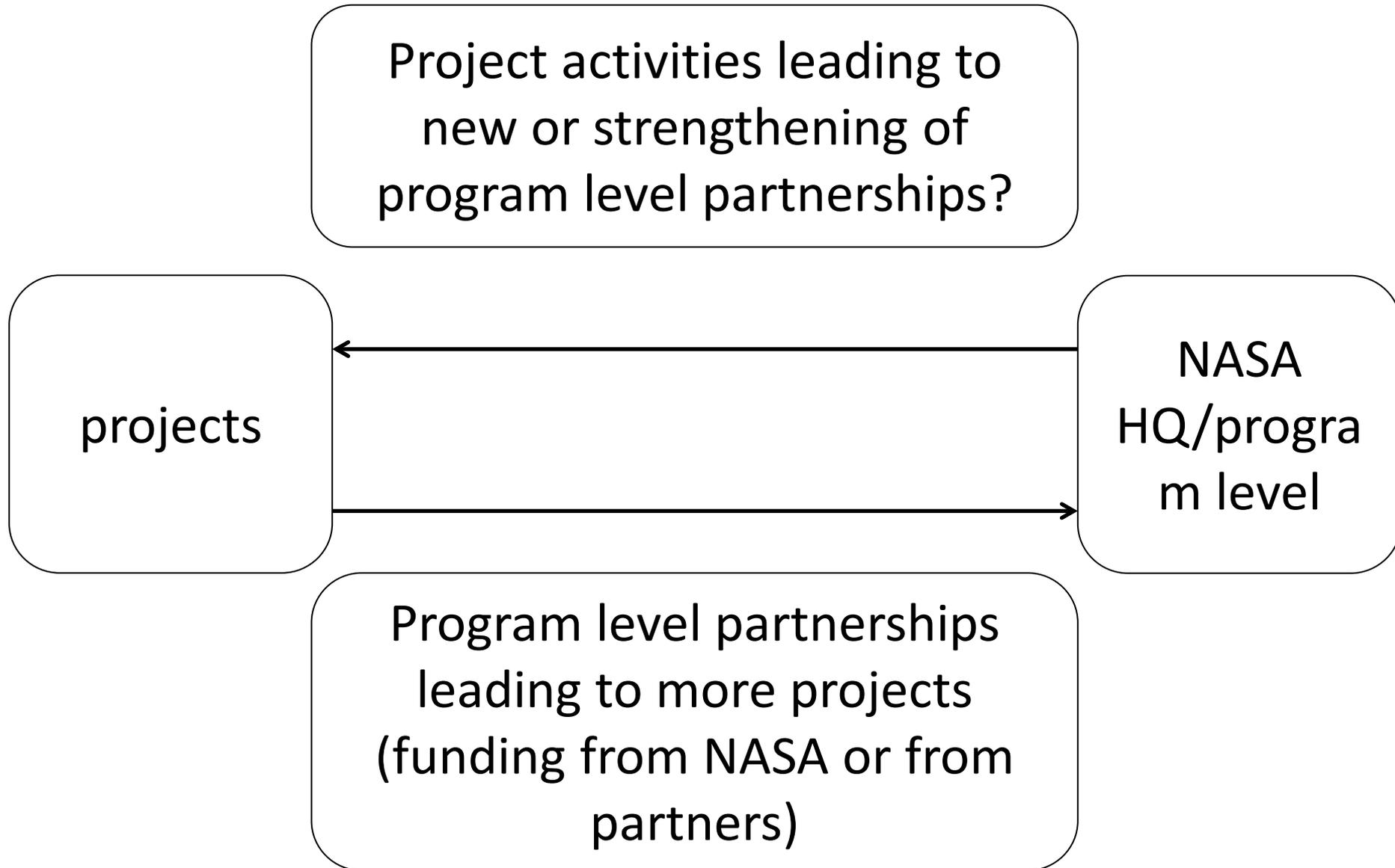


# International Water Focus Area?

Given the number of and diverse set of activities, partnerships – does this warrant an International Water Focus Area?



# Purpose of a Focus Area





# Purpose of a Focus Area

- Identifying key partners/programs
- Identifying priorities and opportunities for NASA water to help and level of interaction – how do we pursue/support new activities/pilots?
- Identifying and representing key capabilities
- Ensuring strong HQ level coordination



# Elements (potential) for a Focus Area

- Core team (WR, CB, WEC) and broader team (other ASP, LCLUC, TE)?
- Regular / quarterly tag up?
- Annual half day meeting (possibly following WR PI meeting?)
- Knowledge Management?
- What else?



# Opportunity to hear from you

- Use breakout session to reflect/discuss what this strategy/approach could look like (Water Focus Area was just one suggestion)



Thank you!