

# How to get Water Agencies to pay for Stormwater Projects

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SCWC Stormwater Workshop, October 11, 2017

# Outline

- Why invest in projects?
- Basic principles of water supply
- How scale affects opportunities
- Bringing it all together

The background of the slide features a complex pattern of thin, vertical, slightly wavy lines in various shades of blue and grey, creating a textured, forest-like appearance. A solid, medium-blue horizontal bar spans the width of the slide, positioned below the patterned area. The text is centered within this bar.

# Why invest? Two worlds of motivation

# Why invest in a project?

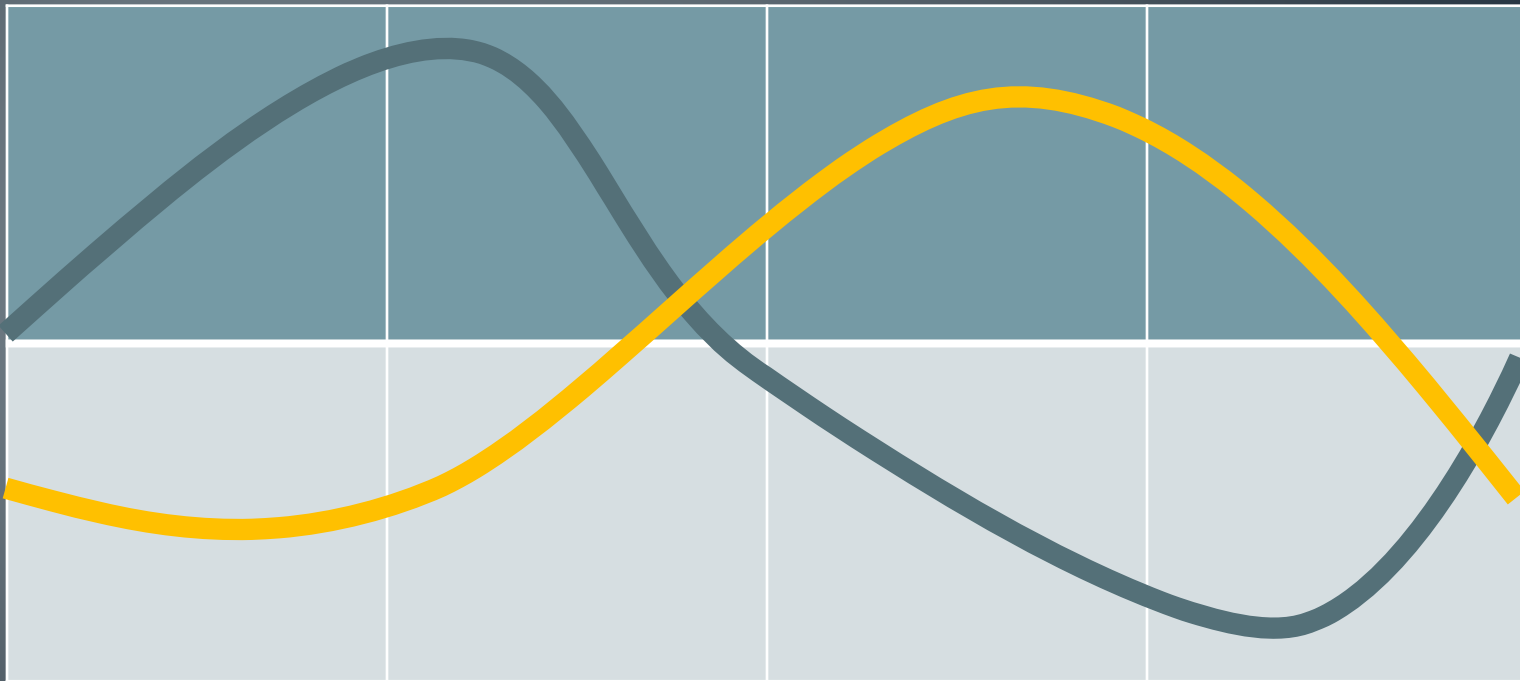
- Water Suppliers
  - Marketable product
  - Manage variability
  - Hedge risk
  - Water quality
  - Match cost to value
  - Qualify for grant funding
- Stormwater Managers
  - Regulatory compliance
  - Protect beneficial uses
  - Put off more costly compliance
  - Coordinate uncoordinated mandates
  - Qualify for grant funding

You can sell water agencies on your  
stormwater project  
*by monetizing your product.*

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# Water Supply Basics: Dampening Variability

# Hydrologic supplies are out of sync with demands



Storage, demand management, and non-hydrologically dependent supplies are valuable to water suppliers.

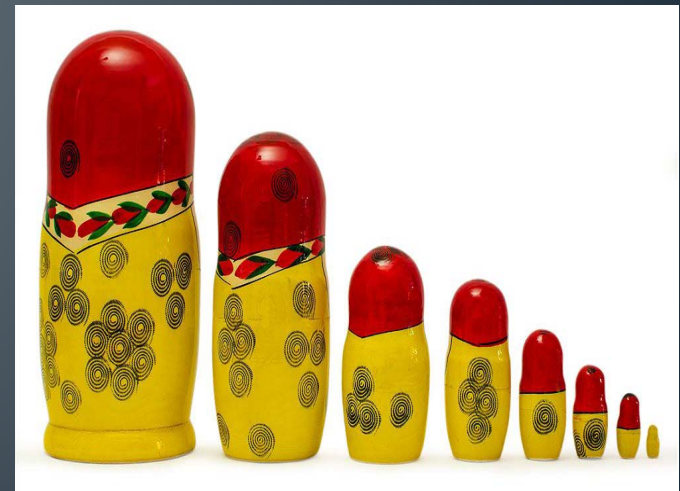


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# Scale: How it transforms management options

# Finding the effective scale of management

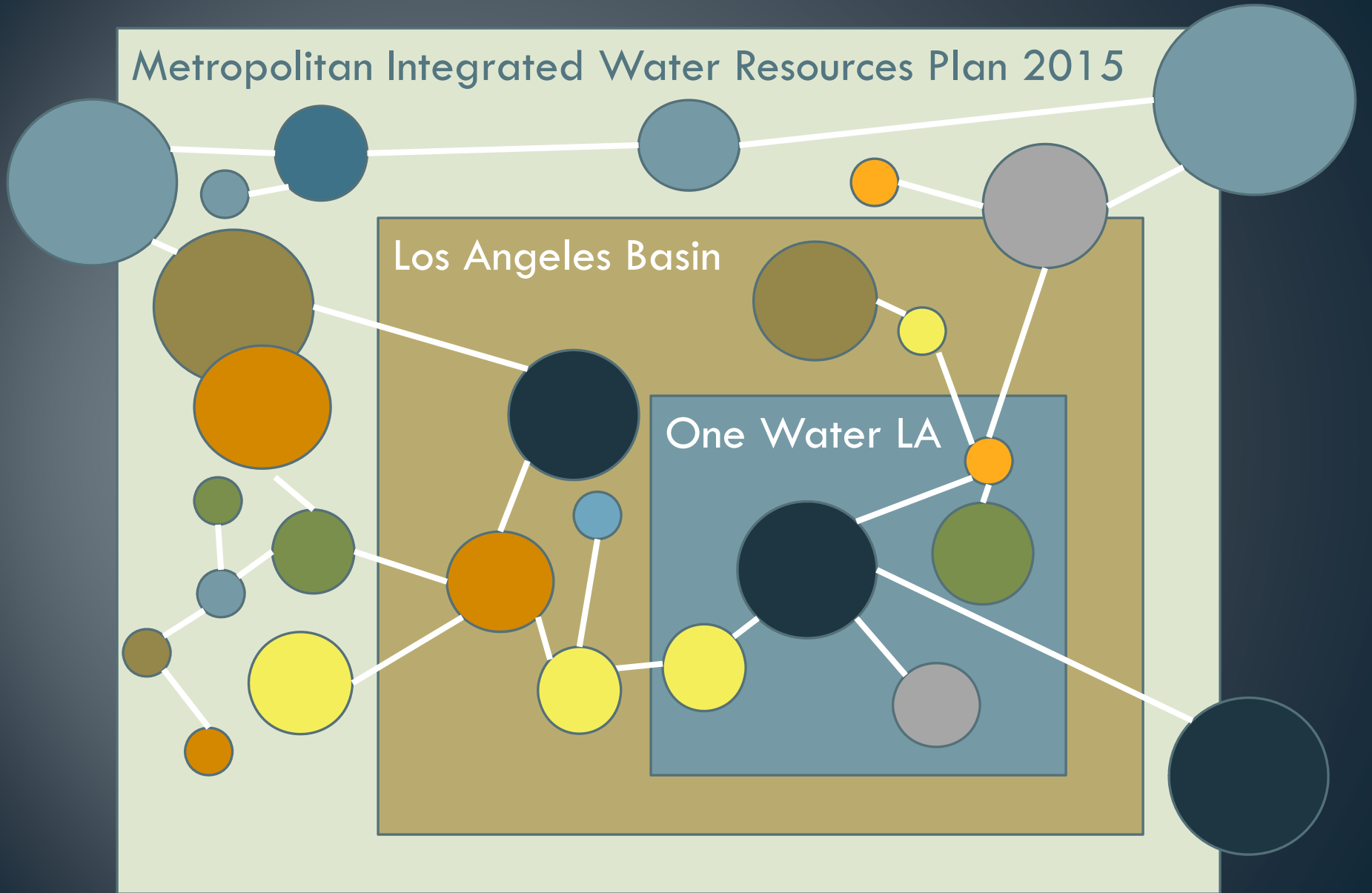
- System characterization: macro to micro
- Institutional scale
- Wicked problems and embedded values
- Uncertainty, curiosity & generating shared knowledge



# Metropolitan Conservation & Local Resource Policy Principles (7/2017)

- Regional Investment Considerations
  - Type and source of water supply
  - Measurable water supply yield or demand reduction
  - Impacts, positive or negative, to Met's system redundancy or emergency risk
  - Impacts, positive or negative, to existing Met system investments and developed system capacity
  - Total cost elements
  - Met's financial exposure and revenue recovery

# Metropolitan Integrated Water Resources Plan 2015



*The scale and shared understanding of a problem set defines the motivation of participants to cooperate in solutions .*

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# Scaling for integration

# Finding shared value at scale

- Transactional
- Groundwater replenishment
- Recycled water augmentation
- Demand management
- Pricing externalities
- Transformational
- One Water LA 2040
- Watershed/Basin scale
- Metropolitan Water District's Integrated Resource Plan 2015
- Global climate change

## Bottom line

- To meet traditional water supplier expectations, stormwater managers need to provide value at a competitive cost.
- There are opportunities to redefine value by redefining inter-relationships at scale.
- Investment in shared vision precedes investment in shared projects.



*Thank you for your attention.*

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**Systems Analysis and Optimization of Local Water Supplies in Los Angeles (Porse et al, 2017)**

[https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0000803](https://doi.org/10.1061/(ASCE)WR.1943-5452.0000803)

**Beyond Markets and States: Polycentric Governance of Complex Economic Systems (Ostrom, 2009)** [https://www.nobelprize.org/nobel\\_prizes/economic-sciences/laureates/2009/ostrom\\_lecture.pdf](https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2009/ostrom_lecture.pdf)

**Dilemmas in a General Theory of Planning (Rittel and Webber, 1973)**

<http://www.ask-force.org/web/Discourse/Rittel-Dilemmas-General-Theory-Planning-1973.pdf>