

Water Choices Forum | Part 1: Water Quality

Testing Ideas and Innovations, and Preparing Our Agenda for 2011
October 19, 2010 • Fairwinds Alumni Center • University of Central Florida



Session Notes

SUMMARY

The Florida Earth Foundation (Foundation) convened the first of three Water Choices Forums (Forum(s)) at the Fairwinds Alumni Center on the University of Central Florida Campus in Orlando on October 19, 2010. The Foundation's Board had been asked by a variety of leaders and experts to consider the best pathway to exploring water choices in the areas of policy, infrastructure, law, regulation, best practices, economic development, and land use. As a result, a Forum process was vetted and launched with the intent of refining Foundation resources to be responsive to stakeholder needs, gathering an ever broader base of leaders and students around the subject, and ensuring participants would be in a position to stage and set expectations for Forum agendas of the future on their own terms. It was the Board's expectation that standards of engagement and quality of content be measured, in part, through professional certifications.

The 6 ½ hour Forum adjourned with a call for **BEST PRACTICES**, more perspectives from expert practitioners, and on-line resources. A consensus position emerged on the need to explore and develop a **WATER ETHIC**, which would guide policy, politics, development, infrastructure, culture and community values, and measures of success. Participants want to invest more time in the complex issue of the EPA's Nutrient Numeric Criteria. The new **EMPLOY FLORIDA BANNER CENTER FOR WATER RESOURCES** (at Florida Gateway College) was announced as a statewide resource and partner. A new PBS documentary on the Kissimmee River was discussed; and an original, Foundation-coordinated international law school partnership on water issues was launched. Many participants called for future Forums to work in the context of **REGIONALISM** and **REGIONAL COLLABORATION**; and for the Foundation to draw on parallel engagements around Florida so that diverse teams may share and take on Forum assignments.

Participants included attorneys, scientists and economists, public servants, interested citizens, students, employees of water management districts, educators, leaders from not-for-profits and higher education, Board members of the Foundation, legislative staff, and consultancies. They documented best next steps for Forums, and interims between Forums. They were sensitive to and interested in a near-term leadership change in Florida, including Governor, Cabinet, and a number of legislators; and saw a responsibility to capture Forum output to provide a platform for learning and engagement of leaders in what the Foundation refers to as **THE OTHER ISSUE OF THE CENTURY**. Participants shared a sense of urgency in translating complex and often local water issues to an agenda that serves the state, a deep interest in the dynamics and conflicts of personal behaviors v. regulation, and a frustration over single solution EPA standards and an apparent inability to gain flexibility in their application.

A Rudder Team of volunteers worked in advance of and during the Forum to synthesize information and ensure participation. They included: Luna Phillips - Attorney and Shareholder, Gunster Yoakley, **Chair**; Andy Flajole - Environmental Specialist, Florida Power & Light Company; and Cecelia Weaver - Director of South Florida Water Management District's Orlando Regional Service Center.

The second Forum will take place on February 28, 2011 in Miami-Dade at The University of Miami. The agenda will be driven by these Forum Notes and the priorities of participants.

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Agenda

The Forum agenda was designed to answer a number of key questions, engage all speakers and participants in a single, overlapping conversation, and set the stage for a second event in Miami-Dade. Questions of the day included:

What is the urgency of a water quality agenda for Florida?
Why is it the "other issue of the century"?

What is the concept of a "water ethic" and what should it do for Florida/Floridians?

Does the concept of "water credits" have merit for Florida?

What are the impacts (not theories) of the EPA Nutrient Numeric Criteria?

What is the best possible/most productive agenda for Forum #2?

What do we need to learn in the interim?

What resources do we need to better understand?

Progress of the Day

Welcome and Announcements

UCF Fairwinds Alumni Center, University of Central Florida
*Dr. Manor Chopra - Director of Stormwater Academy
University of Central Florida*

Business of the Day

**The Operation and Expectations of a Think Tank
Agenda Questions that Must be Answered**
Don Upton - President, Fairfield Index, Inc.

Meet the Rudder Team

- *Luna Phillips, Gunster Yoakley, Chair*
- *Andy Flajole, Florida Power & Light Company*
- *Cecelia Weaver, Orlando Regional Service Center, SFWMD*

Water, Dollars, Value and Regions

Who Dares to Price, Value and Sustain Water Resources?
Dr. Robert McCormick, BB&T Scholar & Professor Emeritus in Economics, Clemson University and Executive Director, PERC's Enviropreneur Institute, Bozeman, Montana

Conversations • Questions

Regulation and Litigation v. Solving the Problem Understanding the EPA Nutrient Numeric Criteria The World of Litigation and TMDL's

- *The EPA Nutrient Numeric Criteria Issue - Dr. David Tomasko, PBS&J*
- *The World of Litigation - David Childs, Partner, Hopping Green Sams*
- *TMDL's - Thomas Frick, Chief, DEP Watershed Restoration Division*

Conversations • Questions • Progress Check

Can Do!

Case Studies: South Florida's Storm Water Treatment Areas: Upper St. Johns River Project; and Tampa Bay, the Region

- *Jeremy McBryan, Lead Engineer, Federal & State Policy Division, SFWMD*
- *Michael Cullum, Director of St. Johns River Water Management District's Division of Engineering*
- *Tony Cotter, Partner, Gray-Robinson, PA*
- *Jennette Seachrist, SWIM Program Manager, SFWMD*

Conversations • Questions • Progress Check

Working Lunch

One Respondent's Take on the Morning's Work

Wayne Flowers, Shareholder, Lewis Longman & Walker, Jacksonville

Key Announcements and Releases

- *Employ Florida Banner Center for Water Resources*
- *PBS Documentary*
- *Global Law Student Alliance: From St. Thomas and Barry Universities to Delft*

Creating a Water Ethic

Strength, Clarity, Protocol, and Faithfulness

- *Cynthia Barnett, Florida Trend Magazine*
- *Steve Seibert, Senior Vice President and Director of Strategic Visioning Collins Center for Public Policy*
- *Andy McLeod, Director, Florida Government Affairs The Nature Conservancy*

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Progress of the Day

Answering the Questions of the Day

Moderated by Don Upton

Strategies for Action and High Performance Agenda for Forum #2 in South Florida

All Participants, All Experts, Rudder Team

Did We Answer the Questions?

Writing our Forum Notes in Real Time: Providing Results to All

Upton and Participants

Next Steps and Adjourn

Douglas E. Robison, Vice President, PBS&J

Connecting Forum Notes to Expert Speaker Resources

Expert speaker presentations and best practice resources may be found at <http://floridaearth.org/waterchoices>.

Snapshots of Critical Offerings of Data and Perspectives

Vision of University of Central Florida Stormwater Management Academy

Protection and Enhancement of Valuable Surface and Groundwater Supplies for the Benefit of Present and Future Generations [www.stormwater.ucf.edu]

Chopra, Presentation

Valuing Water Services

Western [US] Water is More Like a Private Asset than Eastern Water and is Far more Likely to Flow to the Highest Value User than Water in These Parts

Markets Create Trading Opportunities

- Water Can be Purchased for Fishing Habitat
- Water is Bought and Sold Between Ag Users
- Water is Traded Between Ag Users and Municipalities
- Markets Minimize Water Conflicts

McCormick, Presentation

Water Quality Management – Implications of EPA's (and FEDP's) Proposed Numeric Nutrient Criteria

Use of a Single Metric (Nitrogen or Phosphorous Concentrations in the Water Column) is Overly Simplistic

- Could Miss System Degradation
- Could Declare Systems Degraded that Aren't

Potential Approach

- Water Quality Evaluation and Restoration Process Driven by Site-specific Goals
- Deadlines and Process Driven by Scientists and Resource Managers, with Input (not Direction and Timelines) from Regulated and Environmental Communities
- Enhanced Trust Needed between Environmental Community, Regulated Community, Regulators and Scientists

Tomasko, Presentation

South Florida's Stormwater Treatment Areas (STAs)

STA Treatment Performance

- Water Year 2010 (May 1, 2009 – April 30, 2010)
 - Received 1.39 Million Acre-feet of Water
 - Provided 76% Reduction in Phosphorous Load
 - Average Inflow Phosphorus Concentration: 147 ppb
 - Average Outflow Phosphorus Concentration: 33 ppb
- Since 1994 – Over 1,400 Metric Tons of Phosphorous Have Been Retained in the STAs that Would Have Otherwise Entered the Everglades

McBryan, Presentation

Mid-point Program Observations

"I Think We are Dealing with Three Areas as We Focus on a Water Ethic. First, our Responsibility for the Creation called Earth; Second, our Relationship to Each Other and the Policies that Support Our Mutual Interests; and Finally, our Connections to and Use of Economic Principles."

Flowers, Mid-point Forum Comments

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Global Law Student Alliance: From St. Thomas and Barry Universities to Delft

"I am pleased to announce the formation of the Global Law Student Alliance. Thanks to the commitments of St. Thomas University School of Law, Barry University, and UNESCO-IHE, the Florida Earth Foundation is pleased to launch year one of a comparative water law course. The course will involve 35 students, be held in the Netherlands, and be hosted by our long-standing partner, UNESCO-IHE. In the spirit of today's Forum, our focus will be on the comparison of US and Florida water law and European Water Law. This is a natural extension of the Florida-Holland Connection Project which looks at what the Dutch are doing in water management, climate change, and growth stewardship."

Stan Bronson
Executive Director of the Florida Earth Foundation

Employ Florida Banner Center for Water Resources Announcement

The newly created Employ Florida Banner Center for Water Resources aspires to be the statewide, go-to resource for cutting-edge training for entry-level and experienced workers in the water resources industry.
<http://www.waterbannercenter.com/>

Blue Path: Toward a Water Ethic For Florida

Florida's Current Water Ethos

- Government Agencies: View Responsibility to Find & Provide more Water for Future Population & Economic Growth
- Large Water Users: View Water & Water Systems Primarily as Capital Assets
- Citizens: View Water as Symbol of Prosperity & Success, Expressed in Expansive Lawns & other Notions of Abundance

PROBLEM: Our Core Beliefs Leave Florida with an Unsustainable Water Future

New, Blue Path:

- Water-focused Political Leadership (Australia, the Netherlands, Singapore)
- Water Utilities Champion Reform (San Antonio, Perth, Philly)
- The Institutions We Admire Change (Universities Key)
- Commercial Tipping Point as Private Businesses See Ample Financial and Civic Reason to Change
- Residential Tipping Point as Enough Citizens Buy-in
- It Doesn't Take a Majority of Business and Citizen Buy-in to Tip the Entire Community to the Water Ethic

Barnett, Presentation

Answers to Questions for the Day

What is the Urgency of a Water Quality Agenda for Florida? Why is it the "Other Issue of the Century"?

Working Answer. The urgency is related to: a "one size fits all" EPA standard; economic recovery leading to a population growth for Florida; water resources reaching capacity or even exhaustion; the need for more sophisticated economic modeling; the need to translate local to regional solutions; and the responsibility to import more best practices and expert practitioners into the conversation. This is the "other issue" of the century because water ultimately shapes and limits various forms of growth, promotes innovation in infrastructure and economic models, and provides communities with an imperative to anticipate and model for the future.

What is the Concept of a "Water Ethic" and What Should it Do for Floridians?

Working Answer. A "water ethic" concerns the shared understanding of individuals in their communities, businesses, homes, and voting booths regarding the values of shared action. It concerns tangible outcomes that are broadly desired and appreciated. A "water ethic" may be apparent in regulation and policy, but it may also operate in an informal, cultural environment. It shapes relationships and expectations for qualitative and quantitative impacts; and ultimately shapes the nature and value of water transactions and usage. A "water ethic" shapes the reputation of Florida on the global stage.

Does the Concept of "Water Credits" have merit for Florida?

Working Answer. TBD – Continue to explore in the next forums

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What are the Impacts of the EPA Nutrient Numeric Criteria?

Working Answer. Under discussion, but the “one size fits all” may be harmful at times and ignore the need to provide custom, best-suited solutions for each case and ecosystem. Promote a sense of helplessness among leaders and citizens because regulation and implementation appears to be in the hands of the courts. Continue to explore in next forums.

What is the Best Possible/Most Productive Agenda for Forum #2?

Working Answer. More case studies from the international community; more access to practitioners and experts; discuss the best approach to a compendium of best practices; more economic impact information/approaches; discussion on the conflicts and values between Western (US) water law and the Eastern approach; a detailed tutorial and discussion on the EPA nutrient numeric criteria; details on the complex and important nexus between water and energy; discussion of the best way to prepare and inform elected officials about water; and exploration of how to advance a water ethic for Florida.

What do We Need to Learn in the Interim?

Working Answer. How to navigate, use, and add best practice content to an ever deepening Florida Earth Foundation portal; and approaches to drawing from parallel events and discussion groups

What Resources do We Need to Better Understand?

Working Answer. Best practice compendium; international best practices; and details on EPA Nutrient Numeric Criteria

Participants and Rudder Team Set Direction and Priorities for the Coming Year of Work

The Forum’s closing hour included small group feedback on the question of **what must be on the next forum’s**

agenda and what do we need to know

(data requests). Because the responses from fourteen small groups were in direct response to the day of work, they are reproduced here, in full:

GROUP 1

- *How to influence personal behavior without resorting to regulation?*
- *Education for awareness: Such as the Indian with the single tear, this was used effectively in an anti-litter campaign. A current commercial follows a rubber ducky through the system: “Every drop you lose, Nature finds.” The challenge may be to translate that to water quantity, because quantity isn’t as easy to demonstrate. The answer may be what happened in Singapore to “Get people close to water.”*

GROUP 2

- *Define waste – set statistical standard that can be applied*

GROUP 3

- *Inclusiveness - Who is deciding the direction*
 - *Experts (regulator v. experts)*
 - *Race*
 - *Economic Status (have & have nots)*
 - *Academia (H.S. degree, college degree, J.D., Ph.D., etc)*
- *Continued Improvement:*
 - *Consumption v. Waste*
 - *Best Practices of Technologies*
- *Conservation Efforts*
- *Communication/Education*
 - *Youth*
 - *Adults*
 - *Future Generations*

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GROUP 4

- What are the best conduits for sharing information with “the common man”?
- What are the methodologies for providing an input for “the common man” to the solutions?

GROUP 5

- Reach out to legislature, officials, and the general population to educate the closeness to water
- Teach stewardship basics to all groups, through successful case studies
- Get leaders ultra-focused on water and water resources
- Have a network of contacts and success stories for mentoring, encouragement and validation
- Compendium

GROUP 6

- Agenda
 - Legislative overview/movement about water, ex. consumptive use permitting
 - Enforcement and compliance of passed existing regulations – is it being done?
- Resource and data request
 - Case studies from major private users
 - Reclaim water system within Orange County

GROUP 7

- Local Sources First – does this policy still make sense?
- Managing for future growth at a time when we have no growth
- How can local governments land use planning and the districts work together?
- What technologies are available for the highest consumptive user and how can we encourage the entities to implement these Bats?
- Long-term funding commitments to ecosystem restoration – is it feasible in our political system?
- Monetizing water resources – what really makes sense?

- Water/energy linkage
- Is education from the ground up the #1 importance in a water Ethos?
- Science-based regulations – one size does not fit all water bodies

GROUP 8

- Teach and Debate an issue such as EPA Nutrient Criteria was handles today
- More examples of success
- Continue water ethics discussion
- Water supply Ethics
- Different kind of discussion – same level of bright, knowledgeable and passionate participants

GROUP 9

- How do we educate the new legislature and governor (electorate and policy maker) on these issues?
- How do we initiate a cultural shift toward a water ethic – such as smoking, drunk driving and littering?
- How do you make it socially unacceptable to have and water St. Augustine grass?
- How do you tie water to economic/financial issues (Economic incentives or disincentives)

GROUP 10

- How do we bring water issues across the both (ethic) to the community at large?
- How do we expand the definition of water issues to include energy and climate change?
- How can Floridians become better educated in water issues
- Resources – data points such as what % of energy used in Florida to move water, heat water, etc.
- Is the 266 gallons/day figure accurate – show how it came about – is it still accurate?

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GROUP 11

- What is the urgency of a water quality agenda for Florida? New regulations which are arbitrary and capricious w/o regulated community input
- Why is it the “other issue of the century”? Scarcity – quantity and quality. The state of California just approved “toilet to tap”, and we may be running out of that option at some point in the near future
- What resources do we need to better understand? Anthropogenic (Human Influences, agriculture – production of food (H2O & fertilizers)
- Energy - water nexus
- Withdrawal vs. consumption
- Potable water systems (\$\$\$)
- Reclaimed vs. NNC
- End product of forums
- Regionalization of issue
- Stakeholder consensus –building process

GROUP 12

- How do we overcome the different points of view on this subject and focus on what is best for the State of Florida
- How do we inspire a similar set of values throughout the state with respect to water? i.e., water conservation. Residents in SWFWMD complain about twice a week watering
- How do we change rules and laws that are outdated in the challenges we face today and create a framework that facilitates change?
- How can the use of terminating (turning back) permitted quantities be used as offsets for public supply increase demands? Allowed in SWFWMD, not in SJRWMD
- Need to know: updated permitted and quantities used within each Water Management District by use

GROUP 13

- Where’s the urgency Quantity or Quality?
- Incentives: benefits – public v. private

- Urgency = opportunity cost
- Water conservation push-back – ethic
- Local sources first
- Florida very parochial

GROUP 14

- Conservation as a real alternative water supply
- Incentive Programs
- Water credits for conservation is essential
- Change the mindset of the public on water via education, media

For more information on this forum and future forums, contact:

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