

### ST. AUGUSTINE

October 7-9, 2010

## PLANNING FOR WATER QUALITY IN NORTHEAST FLORIDA

he Class X fellows, support staff, and guests gathered for lunch to kick off the third NRLI session at the Holiday Isle Hotel in St. Augustine, FL. After lunch, the group moved to the meeting room for a brief introduction and session overview. The support staff introduced the guest speakers and the class reflected on September's Silver Glen Springs Session. Skills learned at the last session included but were not limited to: distinction between positions and interests (helps to underline what people are thinking), separating the issues from the person, and the power that separating people and interests can have.

The shift focused from last month's session to the current session. Laila explained in the overview that this current session would focus on the Basin Management Action Plan (BMAP) that was implemented in the St. Johns River watershed. In short, Total Maximum Daily Loads (TMDLs) were set because the water body was considered impaired. Laila finished the introduction and session overview by briefly going over the agenda for the next three days.





Above: NRLI Alumni, Tatiana Borisova, Jennison Kipp and Carol Lippencott discuss the BMAP process with the Fellows during the opening day of Session 3 in St. Augustine.

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#### THE LOWER ST. JOHNS RIVER BASIN MANAGEMENT ACTION PLAN



Above: Tiffany Busby speaks with the Fellows about the process of setting TMDLs and the BMAP in the Lower St. Johns River Basin.

fter the introduction and session overview, Tiffany Busby from Wildwood Consulting, Inc. gave a presentation titled "Florida's TMDL Program: The Lower St. Johns Nutrient Case Study." The St. Johns River watershed encompasses nearly 1/5 of the state. According to the Clean Water Act (CWA), the St. Johns River was considered to have an overabundance of nutrients. Therefore, TMDLs were set for the St. Johns River. TMDLs are the maximum amount of a pollutant that a waterbody can assimilate and their purpose is to identify quantitative goals for restoration of waterbodies that do not meet State water quality standards. To achieve the TMDLs in the St. Johns River, a BMAP was adopted by the Florida

Department of Environmental Protection. The BMAP set specific allocations or requirements for both point or nonpoint sources of pollution. Sources include upstream waters, urban stormwater, agriculture stormwater, domestic wastewater, and industrial wastewater.

Jennison Kipp and Tatiana Borisova, both NRLI alumni from Class VIII, gave the group an overview of their practicum project, "Stakeholder Perceptions of Water Quality Management in the Lower St. Johns River Basin." The purpose of the practicum was to provide an additional venue for stakeholders to voice their opinions about management of the water quality in the St. Johns River and to provide additional feedback to the regulatory authorities charged with development of water quality policies. Stakeholder focus groups were held to surface perspectives from agricultural producers, local government personnel, and personnel from environmental organizations. The overall themes between the three focus groups were water quality, values and tradeoffs, and policies and programs. The practicum project reiterated the need for balanced stakeholder representation on the BMAP Executive Committee, the importance of broader stakeholder involvement and stakeholder education, the need to develop a BMAP timeline, and the need to account for the full costs and benefits of policy decisions.

Carol Lippincott, also a NRLI alumna and previous employee of the St. Johns River Water Management District addressed some of the differences between the Lower St. Johns River Basin BMAP process and the Orange Creek Basin BMAP process. The Orange Creek Basin is much smaller in size and population and has fewer municipalities, counties, and point source polluters. Carol believes that BMAP processes should focus on smaller geographical areas and that outreach to the stakeholder groups involved is a priority for success.

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#### **NEGOTIATION 1**

Pr. Richard Schneider, Professor in the Department of Urban and Regional Planning at the University of Florida, led the class in their first negotiation session. He mentioned that principal negotiations should be used to attain an outcome that has FEWS (Fairness, Efficiency, Wisdom, and Stability). The class then took part in the Appleton-Baker Problem, an exercise where one fellow acted as a buyer and one fellow acted as a seller. The two fellows negotiated over the sale of a parcel of land and the goal was come to a mutual agreement without knowing the confidential information of the other party.

After the first negotiation exercise, the class learned about the Best Alternative to a Negotiated Agreement (BATNA) and Worst Alternative to a Negotiated Agreement (WATNA). The class also learned that the first offer in a negotiation is the most important because it "anchors" the deal. Dr. Schneider proceeded to lead the group in another activity titled the Rushing River Negotiation. This activity was more complex than the first as it included more stakeholders and more variables which created more obstacles to overcome.



Above left: Dick Schneider teaches negotiation skills during the first day of Session 3; center and right: Fellows practice negiotation using the Appleton-Baker problem as an example.

#### **WORDS TO REMEMBER**

BMAP - Basin Mangement Action Plan

TMDL - Total Maximum Daily Load

BMP - Best Management Practice

ANC - American Nutrient Criteria

CWA - Clean Water Act

FEWS - Fairness, Efficient, Wise, Stable

BATNA - Best Alternative to a Negotiated

Agreement

WATNA- Worst Alternative to a Negotiated

Agreement

MS4 - Municipal Separate Storm Sewer Systems

WDID - Waste Discharge Identification

LID - Low Impact Development

POINT SOURCES (PS) - single identifiable localized source of air, water, thermal, noise or light pollution. NON-POINT SOURCES (NPS) - pollution caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal

waters and ground waters.

#### **READING DISCUSSION**

After a satisfying and much needed dinner, Craig Diamond led the group in the reading discussion. Several fellows felt that the readings were too business oriented while others felt that there aren't win/win situations when it comes to natural resource conflicts. However, most fellows agreed that natural resource negotiations have more variables (ecosystems, money, public access issues, etc.) than some other types of negotiations. The class ended the discussion by reviewing the summary of the book Getting to Yes: Negotiating Agreement Without Giving In. The summary listed four main principles of negotiation: (1) separate people from the problem, (2) focus on interests rather than positions, (3) generate options, and (4) agreements must be based on objective criteria.

#### FIELDTRIP: A Community's Response to BMP Requirements











Pictured from top to bottom: Chris Johns of Tater Farms describes how his farm is responding to the BMP Requirements; Dan Cantliff speaks with the group at the FPWACS in Hastings; Hancock Place, a sustainable housing development in St. Augustine; Jacque Breman welcomes the Fellows to St. Johns County; Sharon Tatum & Tatiana Borisova enjoy a break at the St. Johns; County Extension Office.

The first stop of the field trip was at Tater Farms – an approximately 1,000 acre farm in Hastings that produces potatoes (for potato chips) and sod. Frank Johns owns Tater Farms and his son Chris Johns is helping to manage the farm. Chris Johns is a Class IX graduate and led the discussion of the farm. Chris explained that a big controversy developed when FDEP developed the BMPs for the potato farms. This snag was that the BMPs stipulate a recommended maximum application rate of 200 lbs N/acre for potatoes, which they claimed was derived from a University of Florida Institute of Food and Agricultural Sciences (IFAS) sponsored research study. However, growers typically use 270 lbs N/acre. If potato farmers do not implement the BMPs (and agree to use a maximum application rate of 200 lbs N/acre) then they are required to perform water quality monitoring on their farm. This dilemma was a large discussion item during our field visit at Tater Farms. Chris then led us to a potato field so we could see the low-till operations that they use.

Our next stop was to the IFAS field station were we met Dan Cantliff and Scott Taylor, who are with the Florida Partnership for Water, Agriculture, and Community Sustainability. Dr. Cantliff spoke to us about the stakeholders they work with - which includes producers, County extension office, IFAS, the local community, and those engaaged ecotourism. His talk focused in great detail that the 200 lbs N/acre application rate is not an IFAS recommendation because the study was not conducted as a controlled experiment, it was not replicated, and it was not peer reviewed. He explained that the BMPs for potatoes should be based on time of fertilization, rate, placement of fertilizer, irrigation methods, rainfall, season, and the cultivar. He emphasized that fertilization should focus on the timing and placement of the application and not on the rate since most of the nitrogen is captured in the tubers and cover crop and won't leach from the site.

Our third stop was at Hancock Place — a sustainable housing development for workforce residents. We met Bill Lazar (the developer), Dr. Mark Clark (UF), Jay Kamos (St. Johns County), and Mike Pulliam (consulting engineer). Mr. Lazar explained that many of his design plans were not standard methods and required waivers from the county. Florida Friendly Lawns techniques were implemented to use native plants so sod (which has high water and fertilizer requirements) would not be used. Both Mr. Lazar and Dr. Clark explained that the pollution source from the development was reduced. As a result the stormwater basin could be constructed smaller because the source of pollutants was much lower.

We concluded our fieldtrip with a stop at the St. Johns County Agricultural Center and a tour of the community gardens and attractive facilities. Dr. Jacque Breman, Acting County Extension Director, gave a welcome to the NRLI class and briefly explained the St. Johns County Extension Office. He mentioned that agriculture in St. Johns County accounts for over one billion dollars to the economic sector and that the coast of St. Johns County is nearly all developed except for one small patch on the south end of the county. Dr. Breman stated that there needs to be a healthy balance between urban and rural areas.

#### STAKEHOLDER PANEL



Stakeholder Panel L to R: Burla Martin; Roy Runion; Chris Johns; Marty Childers; Gary Weiss; Mark Clark.

After introducing themselves to the stakeholder panel, the NRLI class discussed with the panel the impacts of the BMAP to St. John's County. The panelists included:

- Mark Clark, University of Florida, Center for Wetlands
- Chris Johns, Tater Farms
- Burla Martin, Putnam County Environmental Council
- Gary Weiss, City of Jacksonville, Environmen tal & Compliance Department
- Roy Runion, City of Hastings
- Marty Childers, City of Hastings

The fellows learned that the BMAP process impacts many different stakeholders. Agricultural producers would like to see a range of nitrogen rates in their Best Management Practices (BMPs) rather than one number to help account for variability. The City of Jacksonville implemented a fertilizer ordinance to help with BMAP compliance. Fellows asked the panel to try and pinpoint specifically who is impacting the basin, but there was a common agreement amongst the panel that everyone in the basin was responsible. There was dialogue on the BMAP's impact on point source polluters (cities, Georgia Pacific, etc.) versus non-point source polluters (agriculture, residents, etc.). Final thoughts from the panel included the following: efforts to try and protect public water resource have to be a balance between use and impact, technology is going to play a role in the process, and that educating the public and getting them involved in the process is going to be crucial to the success of the BMAP.

#### **NEGOTIATION 2**

After returning to the hotel, the group reconvened to finish out day two. Under the watch of Dr. Schneider, the fellows took place in another negotiation exercise, the Cornwallis County Waste Disposal Negotiation Simulation. In this activity, Cornwallis County was looking for new waste disposal alternatives to existing landfills. Each fellow was given a specific role and was asked to defend their preference on their landfill location. Rather than just negotiating on price and/or savings, there were many other variables to contend with. This exercise proved to be difficult as there were many stakeholders with conflicting interests and many unknowns. After going back and forth, the mediators offered solutions and the group discussed their options for settlement.



Holly Ober and Sharon Tatum mediate the negotiation exercise on Day 2.

#### Water Law and Policy in Florida

After breakfast, Dr. Roy Carriker former Director of NRLI and Professor Emeritus in the Food and Resource Economics Department at the University of Florida gave an informative overview of water law and policy in Florida. Early water policy in Florida included legislation to create drainage districts. The Central and Southern Florida Flood Control Project added river channels, dikes, water conservation areas, protective levees, and a drainage network around Lake Okeechobee to keep the lake from flooding into neighboring areas. Water law covers hydrologic interrelationships such as interference between wells, overdraft of the

aquifer, and contamination due to pollution. Common law includes rules such as the Riparian Rights. Dr. Carriker's presentation gave a critique of common law as the dispute settlement process. He stated that reasonable criteria involve uncertainty and that the process itself is flawed. The process operates on a case-by-case basis after-the-fact of the matter rather than being forward thinking.

Dr. Carriker gave an overview of the Florida Water Resources Act of 1972 and how it deals with water allocation issues while the Clean Water Act regulates water quality. This act created five water management districts throughout the state and gave them the responsibility for planning, monitoring, research, and enforcement. To be able to fund these activities, the water management districts are allowed to charge ad valorem taxes. Dr. Carriker finished his presentation by mentioning three water policy issues in Florida, allocation issues, water quality issues, and institutional issues.

#### **Practicum Plan and Discussion**



After an informative presentation on water law and policy in Florida, the fellows spent some time working on their practicum and brainstorming the next step in the process, a detailed draft practicum plan. Photo left: Bruce Delaney meets with Jason Wiles and Micah Thorning to discuss their practicum. Photo right: Laila Racevskis meets with her mentees.



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Luke Langford presents his feedback to the Fellows during the final moments of Session 3.

#### **Debrief and Feedback Panel**

Thomas Abbott led the beachside debrief in which the class pondered many highlights from the session. Fellows continued to debate about win/win situations in natural resource negotiations, the different types of negotiations, the 80/20 rule, the power of listening, and FEWS. The feedback panel was conducted by Eric Bush, Holly Ober, and Luke Langford. The trio took turns entertaining the crowd by creating their own interpretations of the many acronyms used throughout the session. On that note, the report team says BATNA (bye all 'till next assembly).

This report forms part of a series written by current NRLI Fellows. Reports represent and are a product of the experiential learning process that is a highlight of the NRLI program and have not been formally peer reviewed.