

Market-Based Conservation for Working Lands, Natural Resources and Military Training: Lessons Learned from the Market Based Conservation



Initiative (MBCI) Pilot

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North Carolina

- Home to 10 million people
- 9th most populated state in the nation
- By 2030 projected to be 7th largest state with 12.2 million people
- NC Agriculture Industry
 - 18+ Million acres in forest and 8+ million acres in farm
 - contributes \$78 billion to the economy of NC
 - 17% of the states income
 - employs 16% of the states workforce



Image Credit: North Carolina Department of Agriculture



North Carolina

• NC Military Presence

- 3rd largest military population
- Home to the largest Army installation in the world
- Home to largest Amphibious Training Complex in the world
- 10% of the states economic activity
- 2nd largest economic sector in NC



UF IFAS Extension



- Threats to working lands, conservation, and military readiness
 - Unplanned Development
 - Encroachment



Photo Credit: United State Forest Service



Market Based Conservation Initiative

- Protection of military training route
- Used by all services
- 17 counties
- Reverse auction bidding
- Steering committee selection process
- Performance-based contracts
- Attempt to quantify military training as ecosystem service





MBCI Partners: NC Sentinel Landscapes Partnership













North Carolina Foundation for Soil & Water Conservation, Inc.









Methods

- Case study design
- Semi-structured interviews
 - Purposive and snowball sampling
- Analysis: constant comparative method
 - Interviews and partnership documents
 - Evaluative framework for cross-sectoral partnership programs (Melaville & Blank, 1991)
- Results: Key factors influencing results of program





MBCI Landowner Bids

Aggregated Data									
Phases	#Apps	Acres	\$\$	10 Yrs		20 Yrs		30 Yrs	
				#Арр	Acres	#App	Acres	#Apps	Acres
Phase I	385	15,735	\$66,078,523.20	113	4,741	104	3,795	169	7,198
Phase II	117	10,877	\$32,680,995.90	50	1,922	35	4,308	32	4,647
Phase III	399	38,662	\$35,372,964	121	10,875	170	16,468	107	11,026
PH I BR 2	264	10,959							
	119	~5,500	\$6,984,102	81	3,960	132	5,002	50	2,016
	rebids	rebids							
TOTALS	1,165	76,233	\$141,116,584	365	21,498	441	29,573	358	24,887







MBCI Landowner Bids



A 40% increase in acreage offered between Phase I (Ag) and Phase III (Forestry).

More landowner interest in 20 year contracts as lower bids considered in later bid rounds.

- Phase I 44% at 30 years, 27% at 20 years
- Phase III 27% at 30 years, 42% at 20 years
- Phase I Bid Round 2 19% at 30
 yrs, 50% at 20 yrs



Image Credit: NC Foundation of Soil and Water Conservation



MBCI Landowner Bids

- As predicted during program design:
 - Bid Round 2 Phase 1 represents the first occurrence of competition amongst landowners thus driving bids below \$20/acre.
 - The bid range ceiling trended to \$30/acre.
- Approximately 70% of the acreage offered by landowners was for 20+ year contracts.
- First contact signed spring 2015







- 1. Understanding the purpose and associated risks of a pilot program
- 2. Perception of rural landownership patterns
- 3. Institutional mandates of the Navy
- 4. Funding authority to establish agreements
- 5. Development of landowner trust and program credibility



Purpose and associated risks

- Had to pitch as "concrete" program to attain military support
- Disconnect between idea of testing concept and full protection of military training route (MTR)
- Misunderstood financial risk of approach
- One reason for early termination of pilot

Demonstrates deficiency in education/communication approach



Image Credit: Marine Corps Installations East



Rural Landownership Patterns

- Navy \rightarrow lack of engagement with local communities
 - Less than other branches of service
- Did not understand property ownership in NC
 - Predominantly small family farms
 - Misperception that they could purchase a few tracts and achieve goals
- Resulted in incompatible military process requirements
 - *"restrictions on [landowners] not matching up with the realities of farmers on the ground."*
 - Required perfect land tenure records

Demonstrated need: better educate military stakeholders on the context







Photos Credit: NC Cooperative Extension Service



Institutional Mandates of the Navy

- Program designed to have multiple bid rounds
 - Identify lowest cost to achieve conservation goals
 - Achieve results among breadth of landowners (early-late adopters)
- \$25/acre internal mandate from Navy
- Resulted in early termination of pilot
- Insufficient bidding iterations
 - Unable to test concept and identify acceptable market
 - Inability to identify market characteristics (value of airspace: urban-rural gradient)
 - "questions still surround the bid floor, conservation drivers, limitation of development rights, and possibility of enhancing other ecosystem services".

Multiple bid rounds needed to identify salient market, variance across landscape and affect among breadth of adopters





Funding Authority and Landowner Agreements

- U.S. Code § 2684a (Agreements to limit encroachments and other constraints on military training, testing, and operations)
 - Evokes real-estate transaction process
 - "complicated tremendously the process of doing the due diligence, title searches, the question about appraisals, the questions about do we need surveys or not, on and on and on."
 - "boils down to...[the Navy] want[s] to assume zero risk."
- Increased cost for due diligence and lengthy process resulting in lost deals
 - Due diligence requirement 60 year title search
 - Involved attorneys and real estate specialists
 - 3 year time from first bid to contract

Recommendation from partnership: SIKES Act Provides better and more flexible funding authority



Landowner Trust and Program Credibility

- Trust and program credibility were significant military issues
- BMPs
 - Partners with established relationships and trust with landowners and community leaders
 - Local administration of program through Soil and Water Conservation Districts
 - Landowner workshops provide effective venue for discussion
 - Farmer from Sampson County began program manager

Trust building using intermediaries sympathetic to landowner needs is critical to program success



Conclusion

- Military involvement creates special nuanced challenges
- Transferable lessons across varying contexts (i.e. Florida)
- Special attention is needed to communication and education efforts
 - Allow program to be implemented in its intended fashion
 - Perception and trust issues will persist without thoughtful, strategic efforts





Questions?

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