

**ARS Agricultural Technology Innovation
Partnership Program (ATIP)**

ATIP and ARS Technology Transfer:

A Partnership to Harness the R&D
Capabilities and Innovations of ARS for
Technology-Based Economic Development

Bryan Kaphammer, Ph.D.
Office of Technology Transfer
Fort Collins, Colorado



Biofuels Workshop
March 15, 2011



Partnering with USDA...

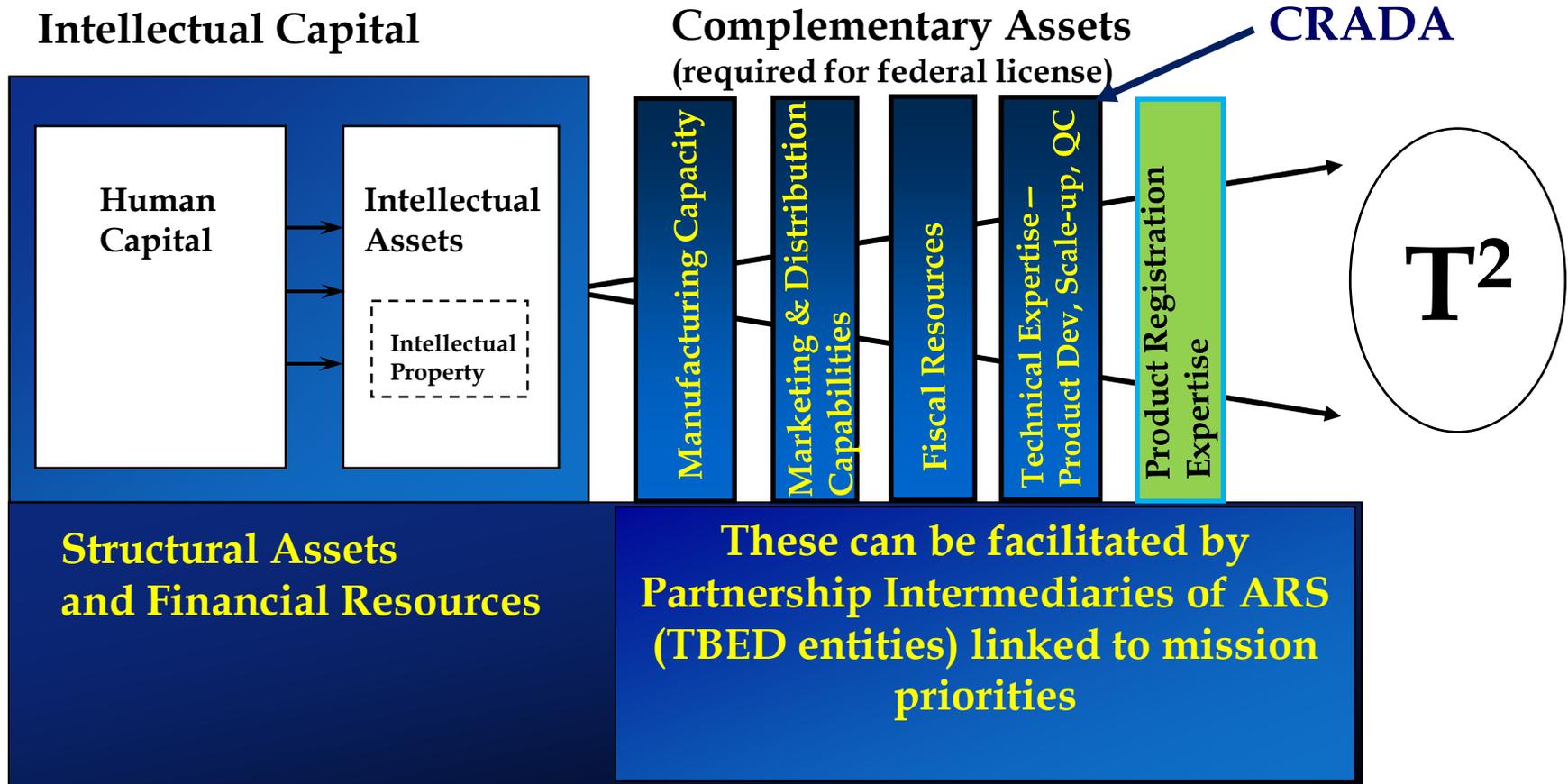


ARS Mission

“ARS conducts research to develop *and transfer* solutions to agricultural problems of high national priority and provide information access and dissemination to:

- ensure high-quality, safe food, and other agricultural products
- assess the nutritional needs of Americans
- *sustain a competitive agricultural economy*
- enhance the natural resource base and the environment, and
- *provide economic opportunities for rural citizens, communities, and society as a whole.*”

Model of a Public/Private Partnership for Commercialization of Research Outcomes



Adapted from Sullivan, P.H., Profiting From Intellectual Capital, John Wiley & Sons, New York, 2000.

Concept & Strategy for Agricultural Technology Innovation Partnership Program

--through Partnership Intermediary Agreements (PIA) --

To partner with *accomplished* economic development entities that can enhance the effectiveness of the ARS technology transfer program and expand its impact

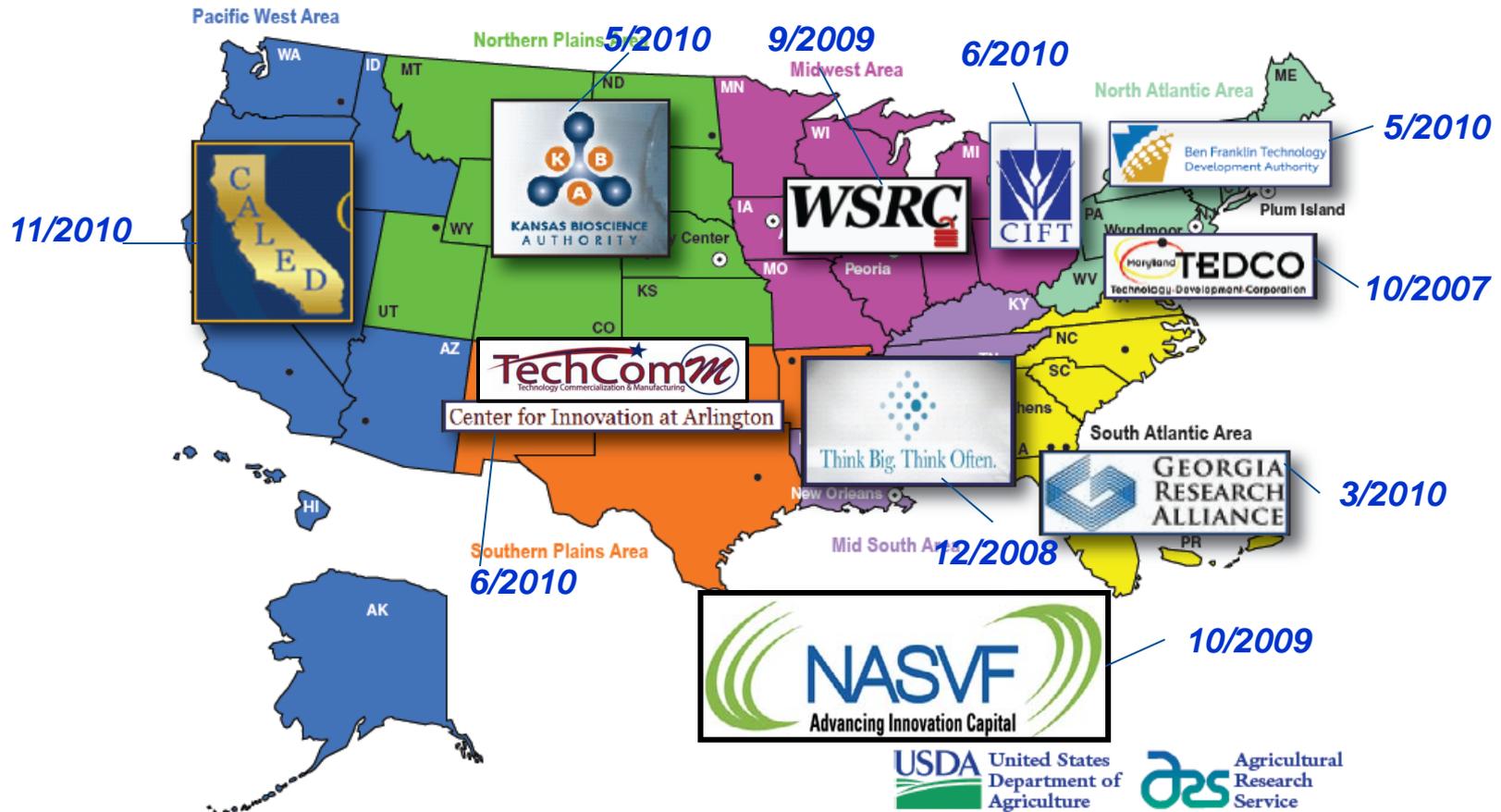
- Each “Partner” linked to one of 8 ARS Areas (each serves as portal to other ED organizations in Area)

To enhance the flow of ARS technologies and research outcomes to *small and expanding businesses* and to encourage technology-based economic development

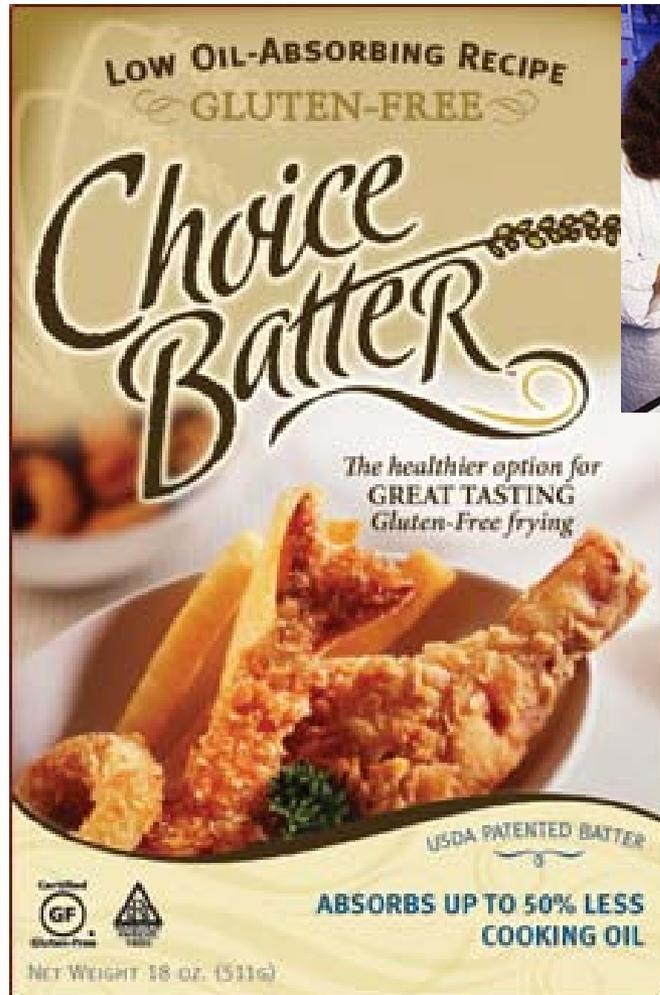
To provide *complementary business assets and business expertise* to private sector partners of ARS

Leveraging the Assets of Partnership Intermediaries of ARS

Agricultural Technology Innovation Partnership Network



Early Success from ATIP (TEDCO) ...

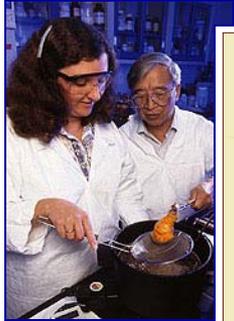


Rice-based frying batter,
“Choice Batter”
gluten free, absorbs 50% less
oil (Fred Shih, New
Orleans, LA)

CrispTek, LLC

- Marketing plan: Howard Community College entrepreneurship school
- ARS Licensed 4 April 2008
- TEDCO support October 2008 (MTTCF; \$75K)
- First sale, 3 May 2009
- Oct. 2010: Internet sales; 400 stores; 3 food companies (*New CRADA*)

Economic Impact Study (5 yr projection to 2014):



Kim Daigle,
Fred Shih

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

**Economic Impact Research Report
CrispTek**

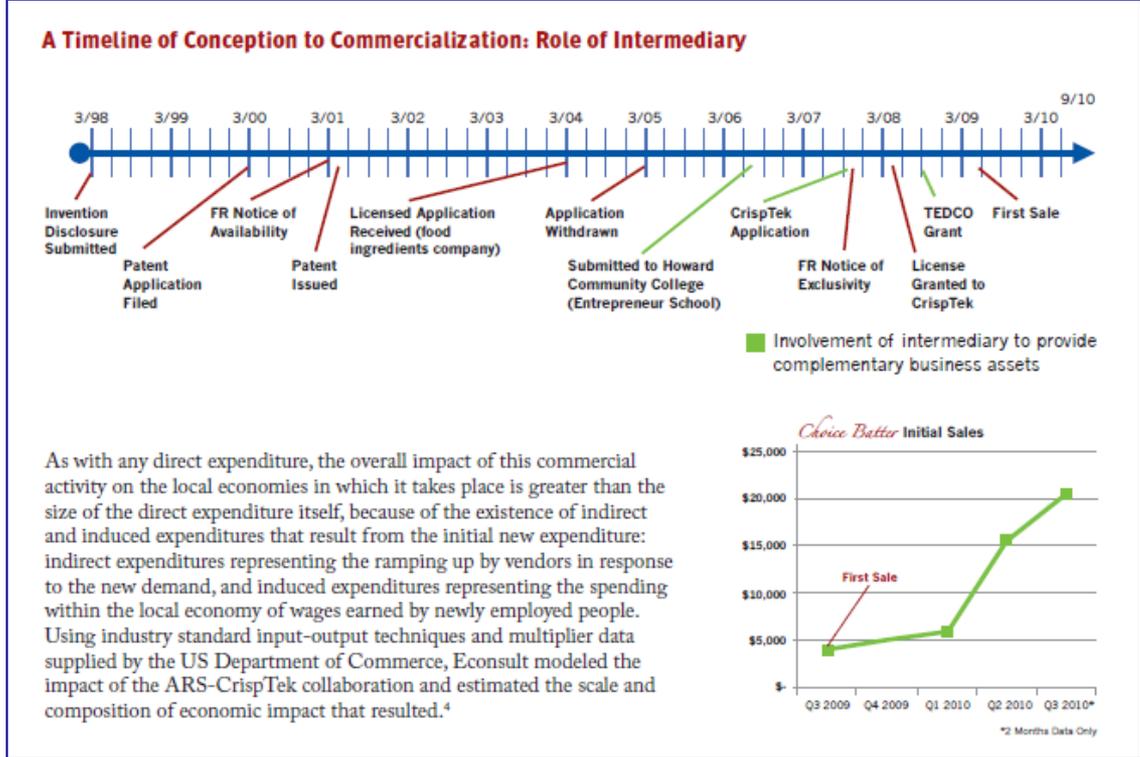
LOW OIL-ABSORBING RECIPE
- GLUTEN-FREE -

Choice Batter

The healthier option for GREAT TASTING chicken and shrimp.

ABSORBS UP TO 50% LESS COOKING OIL

Logos: ARS, Econsult Corporation, NASVF, TEDCO, USDA



Howard Community College
entrepreneur program

\$4.7M sales, 95 jobs, impact in 4 states (MD, IA, IL, TX); new CRADA at SRRC
CrispTek, LLC, Columbia, MD

What can the ARS ATIP Network Do for U.S. Businesses?

- **Guide** local / regional business with research needs consistent with ARS priorities to the appropriate ARS scientist in Northern Plains Area or elsewhere across ARS (CRADA opportunities)
- **Triage** business plans of private sector to seek well-qualified candidates for licensing / research partnerships with ARS
- **Acquire** marketing assessments on ARS technologies from 3rd party sources (business schools, entrepreneur programs, angel investors, etc.) for targeted marketing
- **Coordinate** “Research & Technology Showcase” events to facilitate partnerships with private sector companies
- **Assist** in accessing public / private funds
 - SBIR, angel investors / state funds
- **Assist** in problem solving manufacturing capacity
- **Network** with other ATIP members and other federal PIA networks.



DoD PIA Network Members



Center for Innovation at Arlington



OFFICE OF TECHNOLOGY TRANSITION PARTNERSHIP INTERMEDIARY NETWORK

A USDA / DoD Partnership...

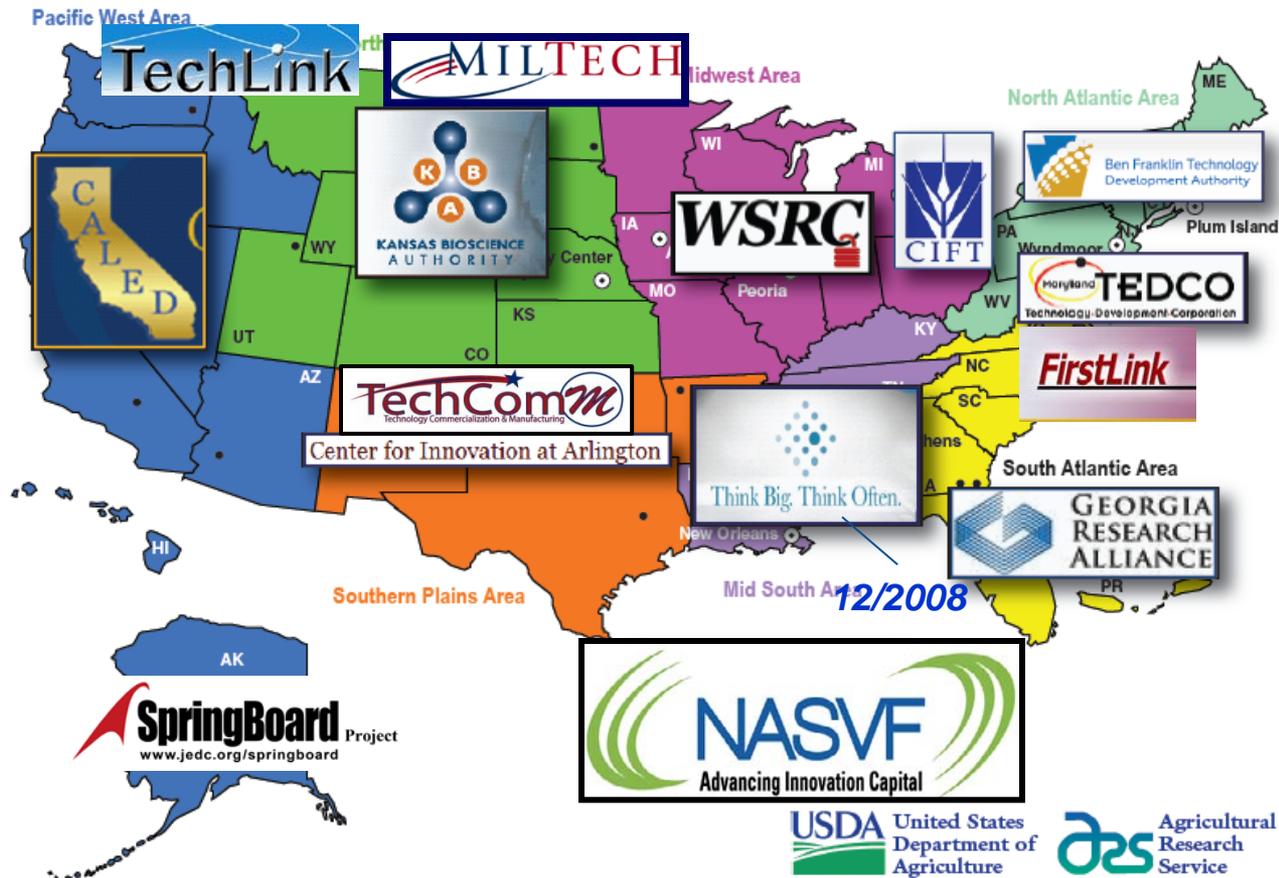
ARS ATIP and DoD's OTTPIN reached agreement to formalize interactions to create *a new model to facilitate public/private partnerships for sustainable economic development and to address common interests of DoD and USDA.*

Example projects may include:

- *Local / regional food production in cities and DoD installations*
- *Distributed bioenergy production from biomass*
- *Zoonotics & emerging diseases*
- *Health & nutrition of DoD personnel and dependents*

Leveraging the Assets of Partnership Intermediaries of ARS

Agricultural Technology Innovation Partnership Network



ARS Office of Technology Transfer

... promoting adoption & commercialization of USDA research outcomes

Richard J. Brenner, Ph.D.
Assistant Administrator
5601 Sunnyside Ave
Beltsville, MD 20705
(301) 504-6905

Bryan Kaphammer, Ph.D.
Technology Transfer Coordinator
NPA and SPA
Fort Collins, CO
(970) 492-7028

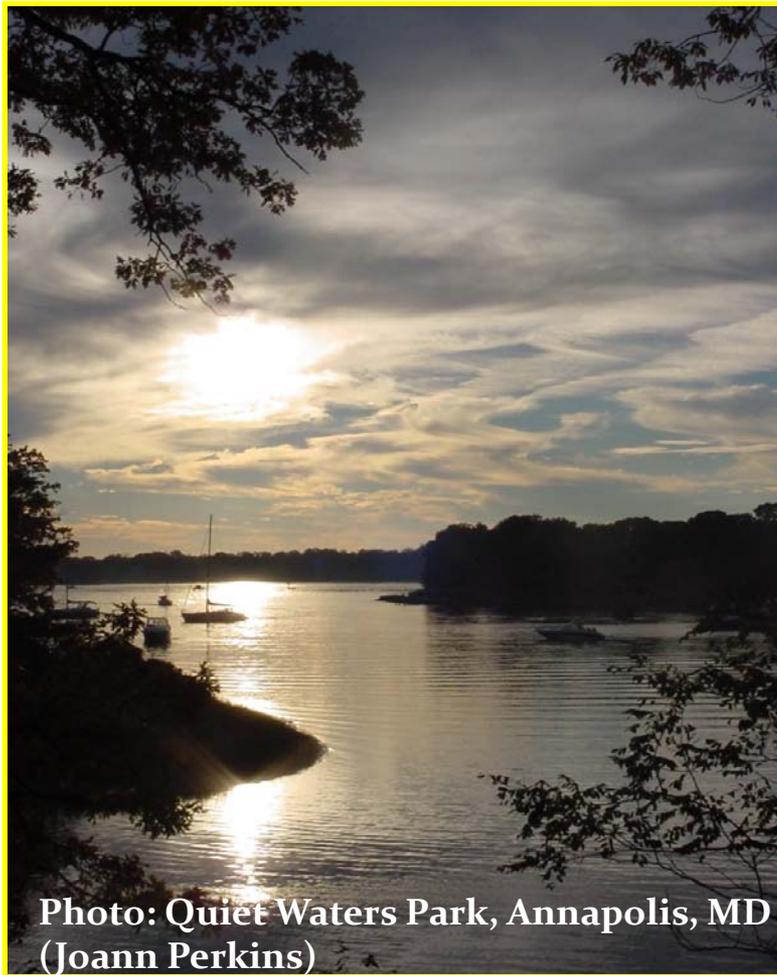


Photo: Quiet Waters Park, Annapolis, MD
(Joann Perkins)